Mohammad-Reza Hajirezaei

List of Publications by Year
in descending order

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		44069	58581
101	7,475	48	82
papers	citations	h-index	g-index

108	108	108	8792
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Chimeric TGA Repressor Slows Down Fruit Maturation and Ripening in Tomato. Plant and Cell Physiology, 2022, 63, 120-134.	3.1	9
2	Expression of Flavodiiron Proteins Flv2-Flv4 in Chloroplasts of Arabidopsis and Tobacco Plants Provides Multiple Stress Tolerance. International Journal of Molecular Sciences, 2021, 22, 1178.	4.1	10
3	Coordinating the morphogenesis-differentiation balance by tweaking the cytokinin-gibberellin equilibrium. PLoS Genetics, 2021, 17, e1009537.	3.5	14
4	Engineering Climate-Change-Resilient Crops: New Tools and Approaches. International Journal of Molecular Sciences, 2021, 22, 7877.	4.1	5
5	ITPK1 is an InsP6/ADP phosphotransferase that controls phosphate signaling in Arabidopsis. Molecular Plant, 2021, 14, 1864-1880.	8.3	51
6	Involvement of the auxinâ€“cytokinin homeostasis in adventitious root formation of rose cuttings as affected by their nodal position in the stock plant. Planta, 2021, 254, 65.	3.2	15
7	Flooding Causes Dramatic Compositional Shifts and Depletion of Putative Beneficial Bacteria on the Spring Wheat Microbiota. Frontiers in Microbiology, 2021, 12, 773116.	3.5	25
8	Proteomic and metabolomic analysis of desiccation tolerance in wheat young seedlings. Plant Physiology and Biochemistry, 2020, 146, 349-362.	5.8	13
9	Transcriptional and Metabolic Profiling of Potato Plants Expressing a Plastid-Targeted Electron Shuttle Reveal Modulation of Genes Associated to Drought Tolerance by Chloroplast Redox Poise. International Journal of Molecular Sciences, 2020, 21, 7199.	4.1	12
10	Providing an Additional Electron Sink by the Introduction of Cyanobacterial Flavodiirons Enhances Growth of A. thaliana Under Various Light Intensities. Frontiers in Plant Science, 2020, 11, 902.	3.6	75
11	Seminal and Nodal Roots of Barley Differ in Anatomy, Proteome and Nitrate Uptake Capacity. Plant and Cell Physiology, 2020, 61, 1297-1308.	3.1	12
12	Volatiles from the fungal phytopathogen Penicillium aurantiogriseum modulate root metabolism and architecture through proteome resetting. Plant, Cell and Environment, 2020, 43, 2551-2570.	5.7	19
13	Photosynthetic characterization of flavodoxin-expressing tobacco plants reveals a high light acclimation-like phenotype. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148211.	1.0	13
14	Plastid-Targeted Cyanobacterial Flavodiiron Proteins Maintain Carbohydrate Turnover and Enhance Drought Stress Tolerance in Barley. Frontiers in Plant Science, 2020, 11, 613731.	3.6	7
15	Genetics and Genomics of Stomatal Traits for Improvement of Abiotic Stress Tolerance in Cereals. Sustainable Development and Biodiversity, 2019, , 1-20.	1.7	2
16	Expression of a Chloroplast-Targeted Cyanobacterial Flavodoxin in Tomato Plants Increases Harvest Index by Altering Plant Size and Productivity. Frontiers in Plant Science, 2019, 10, 1432.	3.6	16
17	Ammonium mediated changes in carbon and nitrogen metabolisms induce resistance against Pseudomonas syringae in tomato plants. Journal of Plant Physiology, 2019, 239, 28-37.	3.5	23
18	Role of auxin homeostasis and response in nitrogen limitation and dark stimulation of adventitious root formation in petunia cuttings. Annals of Botany, 2019, 124, 1053-1066.	2.9	28

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19	Molecular and physiological control of adventitious rooting in cuttings: phytohormone action meets resource allocation. Annals of Botany, 2019, 123, 929-949.	2.9	165
20	Leaf Senescence: The Chloroplast Connection Comes of Age. Plants, 2019, 8, 495.	3.5	34
21	An Age-Dependent Sequence of Physiological Processes Defines Developmental Root Senescence. Plant Physiology, 2019, 181, 993-1007.	4.8	22
22	Differential root and shoot responses in the metabolism of tomato plants exhibiting reduced levels of gibberellin. Environmental and Experimental Botany, 2019, 157, 331-343.	4.2	16
23	Root endophytic fungus Piriformospora indica improves drought stress adaptation in barley by metabolic and proteomic reprogramming. Environmental and Experimental Botany, 2019, 157, 197-210.	4.2	80
24	Potential roles of <scp>YCF</scp>54 and ferredoxinâ€<scp>NADPH</scp> reductase for magnesium protoporphyrin monomethylester cyclase. Plant Journal, 2018, 94, 485-496.	5.7	25
25	Faster photosynthetic induction in tobacco by expressing cyanobacterial flavodiiron proteins in chloroplasts. Photosynthesis Research, 2018, 136, 129-138.	2.9	43
26	Expression of a Plastid-Targeted Flavodoxin Decreases Chloroplast Reactive Oxygen Species Accumulation and Delays Senescence in Aging Tobacco Leaves. Frontiers in Plant Science, 2018, 9, 1039.	3.6	46
27	The Defense-Related Isoleucic Acid Differentially Accumulates in Arabidopsis Among Branched-Chain Amino Acid-Related 2-Hydroxy Carboxylic Acids. Frontiers in Plant Science, 2018, 9, 766.	3.6	23
28	Abscisic acid influences tillering by modulation of strigolactones in barley. Journal of Experimental Botany, 2018, 69, 3883-3898.	4.8	51
29	Changes in nitrogen availability lead to a reprogramming of pyruvate metabolism. BMC Plant Biology, 2018, 18, 77.	3.6	24
30	A specific role of iron in promoting meristematic cell division during adventitious root formation. Journal of Experimental Botany, 2017, 68, 4233-4247.	4.8	52
31	Chloroplast Redox Status Modulates Genome-Wide Plant Responses during the Non-host Interaction of Tobacco with the Hemibiotrophic Bacterium Xanthomonas campestris pv. vesicatoria. Frontiers in Plant Science, 2017, 8, 1158.	3.6	47
32	Induction of Barley Silicon Transporter HvLsi1 and HvLsi2, increased silicon concentration in the shoot and regulated Starch and ABA Homeostasis under Osmotic stress and Concomitant Potassium Deficiency. Frontiers in Plant Science, 2017, 8, 1359.	3.6	78
33	Increase of DNA Methylation at the HvCKX2.1 Promoter by Terminal Drought Stress in Barley. Epigenomes, 2017, 1, 9.	1.8	37
34	A Potential Role of Flag Leaf Potassium in Conferring Tolerance to Drought-Induced Leaf Senescence in Barley. Frontiers in Plant Science, 2016, 7, 206.	3.6	38
35	Plant Hormone Homeostasis, Signaling, and Function during Adventitious Root Formation in Cuttings. Frontiers in Plant Science, 2016, 7, 381.	3.6	184
36	The Metabolic Signature of Biomass Formation in Barley. Plant and Cell Physiology, 2016, 57, 1943-1960.	3.1	66

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37	Nitrogen remobilisation facilitates adventitious root formation on reversible dark-induced carbohydrate depletion in Petunia hybrida. BMC Plant Biology, 2016, 16, 219.	3.6	25
38	A higher sink competitiveness of the rooting zone and invertases are involved in dark stimulation of adventitious root formation in Petunia hybrida cuttings. Plant Science, 2016, 243, 10-22.	3.6	41
39	The Entnerâ€“Doudoroff pathway is an overlooked glycolytic route in cyanobacteria and plants. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5441-5446.	7.1	160
40	Proteomics Approach for Identification of Nutrient Deficiency Related Proteins in Crop Plants. , 2016, , 177-201.		1
41	Phloem-Specific Methionine Recycling Fuels Polyamine Biosynthesis in a Sulfur-Dependent Manner and Promotes Flower and Seed Development. Plant Physiology, 2016, 170, 790-806.	4.8	22
42	Metabolic and transcriptional response of central metabolism affected by root endophytic fungus Piriformospora indica under salinity in barley. Plant Molecular Biology, 2016, 90, 699-717.	3.9	73
43	Urea retranslocation from senescing Arabidopsis leaves is promoted by <scp>DUR</scp>3â€mediated urea retrieval from leaf apoplast. Plant Journal, 2015, 81, 377-387.	5.7	37
44	Ascorbate biosynthesis and its involvement in stress tolerance and plant development in rice (Oryza) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.9	55
45	Influence of oxygen deficiency and the role of specific amino acids in cryopreservation of garlic shoot tips. BMC Biotechnology, 2015, 15, 40.	3.3	21
46	Comparative proteomic analysis of tobacco expressing cyanobacterial flavodoxin and its wild type under drought stress. Journal of Plant Physiology, 2015, 175, 48-58.	3.5	35
47	Comprehensive Transcriptome Analysis Unravels the Existence of Crucial Genes Regulating Primary Metabolism during Adventitious Root Formation in Petunia hybrida. PLoS ONE, 2014, 9, e100997.	2.5	38
48	Transcriptomic analysis reveals ethylene as stimulator and auxin as regulator of adventitious root formation in petunia cuttings. Frontiers in Plant Science, 2014, 5, 494.	3.6	89
49	Context of action of Proline Dehydrogenase (ProDH) in the Hypersensitive Response of Arabidopsis. BMC Plant Biology, 2014, 14, 21.	3.6	61
50	Ascorbate metabolism in rice genotypes differing in zinc efficiency. Planta, 2014, 239, 367-379.	3.2	33
51	Plant Metabolic Modeling: Achieving New Insight into Metabolism and Metabolic Engineering. Plant Cell, 2014, 26, 3847-3866.	6.6	65
52	Distribution of indole-3-acetic acid in Petunia hybrida shoot tip cuttings and relationship between auxin transport, carbohydrate metabolism and adventitious root formation. Planta, 2013, 238, 499-517.	3.2	142
53	Host-related metabolic cues affect colonization strategies of a root endophyte. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13965-13970.	7.1	185
54	A dual role of tobacco hexokinase 1 in primary metabolism and sugar sensing. Plant, Cell and Environment, 2013, 36, 1311-1327.	5.7	64

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55	Expression of the Minor Isoform Pea Ferredoxin in Tobacco Alters Photosynthetic Electron Partitioning and Enhances Cyclic Electron Flow Â. Plant Physiology, 2013, 161, 866-879.	4.8	27
56	Electrical signaling along the phloem and its physiological responses in the maize leaf. Frontiers in Plant Science, 2013, 4, 239.	3.6	51
57	Simultaneous boosting of source and sink capacities doubles tuber starch yield of potato plants. Plant Biotechnology Journal, 2012, 10, 1088-1098.	8.3	65
58	Feedback inhibition of the general phenylpropanoid and flavonol biosynthetic pathways upon a compromised flavonol-3-O-glycosylation. Journal of Experimental Botany, 2012, 63, 2465-2478.	4.8	146
59	Flavodoxin displays dose-dependent effects on photosynthesis and stress tolerance when expressed in transgenic tobacco plants. Planta, 2012, 236, 1447-1458.	3.2	55
60	Senescenceâ€induced iron mobilization in source leaves of barley (Hordeum vulgare) plants. New Phytologist, 2012, 195, 372-383.	7.3	65
61	Diurnal changes in assimilate concentrations and fluxes in the phloem of castor bean (Ricinus) Tj ETQq1 1 0.784314 rgBT /Overlock 1	3.2	26
62	Root exudation of sugars, amino acids, and organic acids by maize as affected by nitrogen, phosphorus, potassium, and iron deficiency. Journal of Plant Nutrition and Soil Science, 2011, 174, 3-11.	1.9	431
63	A proteomics view on the role of drought-induced senescence and oxidative stress defense in enhanced stem reserves remobilization in wheat. Journal of Proteomics, 2011, 74, 1959-1973.	2.4	111
64	Cyanobacterial flavodoxin complements ferredoxin deficiency in knockedâ€down transgenic tobacco plants. Plant Journal, 2011, 65, 922-935.	5.7	51
65	Altering Trehalose-6-Phosphate Content in Transgenic Potato Tubers Affects Tuber Growth and Alters Responsiveness to Hormones during Sprouting Â Â. Plant Physiology, 2011, 156, 1754-1771.	4.8	138
66	The 2-oxoglutarate/malate translocator mediates amino acid and storage protein biosynthesis in pea embryos. Plant Journal, 2010, 61, 350-363.	5.7	22
67	Over-expression of PR-10a leads to increased salt and osmotic tolerance in potato cell cultures. Journal of Biotechnology, 2010, 150, 277-287.	3.8	37
68	Phosphate systemically inhibits development of arbuscular mycorrhiza in Petunia hybrida and represses genes involved in mycorrhizal functioning. Plant Journal, 2010, 64, 1002-1017.	5.7	354
69	Dark exposure of petunia cuttings strongly improves adventitious root formation and enhances carbohydrate availability during rooting in the light. Journal of Plant Physiology, 2010, 167, 547-554.	3.5	58
70	ROS signaling in the hypersensitive response. Plant Signaling and Behavior, 2010, 5, 393-396.	2.4	147
71	Engineering the future. Development of transgenic plants with enhanced tolerance to adverse environments. Biotechnology and Genetic Engineering Reviews, 2010, 27, 33-56.	6.2	23
72	A comparative proteome approach to decipher the mechanism of rice adaptation to phosphorous deficiency. Proteomics, 2009, 9, 159-170.	2.2	80

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73	Tocopherol deficiency in transgenic tobacco (Nicotiana tabacum L.) plants leads to accelerated senescence. Plant, Cell and Environment, 2009, 32, 144-157.	5.7	57
74	Chloroplastâ€generated reactive oxygen species play a major role in localized cell death during the nonâ€host interaction between tobacco and Xanthomonas campestris pv. vesicatoria. Plant Journal, 2009, 60, 962-973.	5.7	203
75	Molecular physiology of adventitious root formation in Petunia hybrida cuttings: involvement of wound response and primary metabolism. New Phytologist, 2009, 181, 613-625.	7.3	175
76	Antisense inhibition of enolase strongly limits the metabolism of aromatic amino acids, but has only minor effects on respiration in leaves of transgenic tobacco plants. New Phytologist, 2009, 184, 607-618.	7.3	46
77	Inoculation of sugarcane with Pantoea sp. increases amino acid contents in shoot tissues; serine, alanine, glutamine and asparagine permit concomitantly ammonium excretion and nitrogenase activity of the bacterium. Journal of Plant Physiology, 2009, 166, 1152-1161.	3.5	39
78	Use of Cyanobacterial Proteins to Engineer New Crops. , 2009, , 65-88.		2
79	Influence of alternating temperature preculture on cryopreservation results for potato shoot tips. Plant Cell Reports, 2008, 27, 1551-1558.	5.6	49
80	Overriding the coâ€limiting import of carbon and energy into tuber amyloplasts increases the starch content and yield of transgenic potato plants. Plant Biotechnology Journal, 2008, 6, 453-464.	8.3	78
81	Combating stress with flavodoxin: a promising route for crop improvement. Trends in Biotechnology, 2008, 26, 531-537.	9.3	84
82	Modulation of carbohydrate metabolism and chloroplast structure in sugarcane leaves which were infected by Sugarcane Yellow Leaf Virus (SCYLV). Physiological and Molecular Plant Pathology, 2008, 73, 78-87.	2.5	29
83	Transgenic Tobacco Plants Overexpressing Chloroplastic Ferredoxin-NADP(H) Reductase Display Normal Rates of Photosynthesis and Increased Tolerance to Oxidative Stress. Plant Physiology, 2007, 143, 639-649.	4.8	87
84	Enhanced plant tolerance to iron starvation by functional substitution of chloroplast ferredoxin with a bacterial flavodoxin. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11495-11500.	7.1	109
85	Functional analysis of the essential bifunctional tobacco enzyme 3-dehydroquinate dehydratase/shikimate dehydrogenase in transgenic tobacco plants. Journal of Experimental Botany, 2007, 58, 2053-2067.	4.8	70
86	RNA interference-mediated repression of sucrose-phosphatase in transgenic potato tubers (Solanum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf on total soluble carbohydrate accumulation. Plant, Cell and Environment, 2007, 31, 071115091544001-???.	5.7	32
87	Sugar-induced increases in trehalose 6-phosphate are correlated with redox activation of ADPglucose pyrophosphorylase and higher rates of starch synthesis in Arabidopsis thaliana. Biochemical Journal, 2006, 397, 139-148.	3.7	518
88	Arabidopsis INOSITOL TRANSPORTER4 Mediates High-Affinity H+ Symport of Myoinositol across the Plasma Membrane. Plant Physiology, 2006, 141, 565-577.	4.8	80
89	The influence of cytosolic phosphorylating glyceraldehyde 3-phosphate dehydrogenase (GAPC) on potato tuber metabolism. Journal of Experimental Botany, 2006, 57, 2363-2377.	4.8	29
90	Functional Replacement of Ferredoxin by a Cyanobacterial Flavodoxin in Tobacco Confers Broad-Range Stress Tolerance. Plant Cell, 2006, 18, 2035-2050.	6.6	169

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91	bac genes for recombinant bacilysin and anticapsin production in Bacillus host strains. Archives of Microbiology, 2005, 183, 71-79.	2.2	90
92	Integrating data from biological experiments into metabolic networks with the DBE information system. In Silico Biology, 2005, 5, 93-102.	0.9	6
93	RNAi-Mediated Tocopherol Deficiency Impairs Photoassimilate Export in Transgenic Potato Plants. Plant Physiology, 2004, 135, 1256-1268.	4.8	157
94	Transgenic tobacco plants expressing antisense ferredoxin-NADP(H) reductase transcripts display increased susceptibility to photo-oxidative damage. Plant Journal, 2003, 35, 332-341.	5.7	60
95	The Sucrose Transporter StSUT1 Localizes to Sieve Elements in Potato Tuber Phloem and Influences Tuber Physiology and Development,. Plant Physiology, 2003, 131, 102-113.	4.8	134
96	Decreased sucrose content triggers starch breakdown and respiration in stored potato tubers (Solanum tuberosum). Journal of Experimental Botany, 2003, 54, 477-488.	4.8	91
97	Antisense-inhibition of ADP-glucose pyrophosphorylase in Vicia narbonensis seeds increases soluble sugars and leads to higher water and nitrogen uptake. Planta, 2002, 214, 954-964.	3.2	72
98	Small changes in the activity of chloroplastic NADP+-dependent ferredoxin oxidoreductase lead to impaired plant growth and restrict photosynthetic activity of transgenic tobacco plants. Plant Journal, 2002, 29, 281-293.	5.7	124
99	Sucrose synthase activity does not restrict glycolysis in roots of transgenic potato plants under hypoxic conditions. Planta, 1999, 210, 41-49.	3.2	60
100	Combined expression of glucokinase and invertase in potato tubers leads to a dramatic reduction in starch accumulation and a stimulation of glycolysis. Plant Journal, 1998, 15, 109-118.	5.7	192
101	Increased potato tuber size resulting from apoplastic expression of a yeast invertase. Nature Biotechnology, 1997, 15, 794-797.	17.5	197