Nicolas L Taylor

List of Publications by Year
in descending order

86 papers	6,003 citations	66234 42 h-index	74018 75 g-index
90 all docs	90 docs citations	90 times ranked	6588 citing authors

#	Article	IF	Citations
1	Energy costs of salt tolerance in crop plants. New Phytologist, 2020, 225, 1072-1090.	3.5	284
2	The Pentatricopeptide Repeat Gene<i>OTP43</i>Is Required for<i>trans</i>-Splicing of the Mitochondrial<i>nad1</i>Intron 1 in<i>Arabidopsis thaliana</i>. Plant Cell, 2007, 19, 3256-3265.	3.1	248
3	Effects of Water Stress on Respiration in Soybean Leaves. Plant Physiology, 2005, 139, 466-473.	2.3	245
4	Differential Impact of Environmental Stresses on the Pea Mitochondrial Proteome. Molecular and Cellular Proteomics, 2005, 4, 1122-1133.	2.5	231
5	Mitochondrial uncoupling protein is required for efficient photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19587-19592.	3.3	226
6	Divalent Metal Ions in Plant Mitochondria and Their Role in Interactions with Proteins and Oxidative Stress-Induced Damage to Respiratory Function. Plant Physiology, 2010, 152, 747-761.	2.3	211
7	The role of mitochondrial respiration in salinity tolerance. Trends in Plant Science, 2011, 16, 614-623.	4.3	199
8	Lipoic Acid-Dependent Oxidative Catabolism of Î±-Keto Acids in Mitochondria Provides Evidence for Branched-Chain Amino Acid Catabolism in Arabidopsis. Plant Physiology, 2004, 134, 838-848.	2.3	176
9	Environmental Stress Causes Oxidative Damage to Plant Mitochondria Leading to Inhibition of Glycine Decarboxylase. Journal of Biological Chemistry, 2002, 277, 42663-42668.	1.6	172
10	Novel Proteins, Putative Membrane Transporters, and an Integrated Metabolic Network Are Revealed by Quantitative Proteomic Analysis of Arabidopsis Cell Culture Peroxisomes Â. Plant Physiology, 2008, 148, 1809-1829.	2.3	169
11	The seminal fluid proteome of the honeybee <i>Apis mellifera</i>. Proteomics, 2009, 9, 2085-2097.	1.3	152
12	The pentatricopeptide repeat gene <i>OTP51</i> with two LAGLIDADG motifs is required for the <i>cis</i>â€splicing of plastid <i>ycf3</i> intronâ€ƒ2 in <i>Arabidopsis thaliana</i>. Plant Journal, 2008, 56, 157-168.	2.8	148
13	Abiotic environmental stress induced changes in the Arabidopsis thaliana chloroplast, mitochondria and peroxisome proteomes. Journal of Proteomics, 2009, 72, 367-378.	1.2	142
14	Wheat mitochondrial respiration shifts from the tricarboxylic acid cycle to the <scp>GABA</scp> shunt under salt stress. New Phytologist, 2020, 225, 1166-1180.	3.5	135
15	Mitochondrial Composition, Function and Stress Response in Plants^F. Journal of Integrative Plant Biology, 2012, 54, 887-906.	4.1	129
16	Experimental Analysis of the Rice Mitochondrial Proteome, Its Biogenesis, and Heterogeneity Â Â. Plant Physiology, 2009, 149, 719-734.	2.3	127
17	Differential Molecular Responses of Rice and Wheat Coleoptiles to Anoxia Reveal Novel Metabolic Adaptations in Amino Acid Metabolism for Tissue Tolerance Â Â. Plant Physiology, 2011, 156, 1706-1724.	2.3	124
18	Nucleotide and RNA Metabolism Prime Translational Initiation in the Earliest Events of Mitochondrial Biogenesis during Arabidopsis Germination Â Â. Plant Physiology, 2012, 158, 1610-1627.	2.3	124

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19	Refining the Definition of Plant Mitochondrial Presequences through Analysis of Sorting Signals, N-Terminal Modifications, and Cleavage Motifs Â Â. Plant Physiology, 2009, 150, 1272-1285.	2.3	119
20	Insights into female sperm storage from the spermathecal fluid proteome of the honeybee Apis mellifera. Genome Biology, 2009, 10, R67.	13.9	116
21	Wheat Mitochondrial Proteomes Provide New Links between Antioxidant Defense and Plant Salinity Tolerance. Journal of Proteome Research, 2010, 9, 6595-6604.	1.8	107
22	TECHNICAL ADVANCE: Freeâ€flow electrophoresis for purification of plant mitochondria by surface charge. Plant Journal, 2007, 52, 583-594.	2.8	102
23	Targets of stress-induced oxidative damage in plant mitochondria and their impact on cell carbon/nitrogen metabolism. Journal of Experimental Botany, 2003, 55, 1-10.	2.4	91
24	Isolation of Intact, Functional Mitochondria From the Model Plant Arabidopsis thaliana. Methods in Molecular Biology, 2007, 372, 125-136.	0.4	90
25	Multiple Lines of Evidence Localize Signaling, Morphology, and Lipid Biosynthesis Machinery to the Mitochondrial Outer Membrane of Arabidopsis Â. Plant Physiology, 2011, 157, 1093-1113.	2.3	90
26	Recent Advances in the Composition and Heterogeneity of the Arabidopsis Mitochondrial Proteome. Frontiers in Plant Science, 2013, 4, 4.	1.7	86
27	Succinate dehydrogenase assembly factor 2 is needed for assembly and activity of mitochondrial complex II and for normal root elongation in <scp>A</scp>rabidopsis. Plant Journal, 2013, 73, 429-441.	2.8	84
28	Resolving and Identifying Protein Components of Plant Mitochondrial Respiratory Complexes Using Three Dimensions of Gel Electrophoresis. Journal of Proteome Research, 2008, 7, 786-794.	1.8	80
29	Response of mitochondria to light intensity in the leaves of sun and shade species. Plant, Cell and Environment, 2005, 28, 760-771.	2.8	79
30	A survey of the <i>Arabidopsis thaliana</i> mitochondrial phosphoproteome. Proteomics, 2009, 9, 4229-4240.	1.3	78
31	The Cytotoxic Lipid Peroxidation Product 4-Hydroxy-2-nonenal Covalently Modifies a Selective Range of Proteins Linked to Respiratory Function in Plant Mitochondria. Journal of Biological Chemistry, 2007, 282, 37436-37447.	1.6	76
32	Addressing Research Bottlenecks to Crop Productivity. Trends in Plant Science, 2021, 26, 607-630.	4.3	76
33	Resource: Mapping the <i>Triticum aestivum</i> proteome. Plant Journal, 2017, 89, 601-616.	2.8	74
34	Connecting salt stress signalling pathways with salinityâ€induced changes in mitochondrial metabolic processes in <scp>C</scp>3 plants. Plant, Cell and Environment, 2017, 40, 2875-2905.	2.8	72
35	<i>Arabidopsis</i> tRNA Adenosine Deaminase Arginine Edits the Wobble Nucleotide of Chloroplast tRNAArg(ACG) and Is Essential for Efficient Chloroplast Translation. Plant Cell, 2009, 21, 2058-2071.	3.1	69
36	Matrix-assisted laser desorption/ionisation mass spectrometry imaging and its development for plant protein imaging. Plant Methods, 2011, 7, 21.	1.9	68

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37	Analysis of the Rice Mitochondrial Carrier Family Reveals Anaerobic Accumulation of a Basic Amino Acid Carrier Involved in Arginine Metabolism during Seed Germination Â Â. Plant Physiology, 2010, 154, 691-704.	2.3	67
38	Investigating the Role of Respiration in Plant Salinity Tolerance by Analyzing Mitochondrial Proteomes from Wheat and a Salinity-Tolerant Amphiploid (Wheat Ã— <i>Lophopyrum elongatum</i>). Journal of Proteome Research, 2013, 12, 4807-4829.	1.8	65
39	The <i>Arabidopsis thaliana</i> 2â€Ð gel mitochondrial proteome: Refining the value of reference maps for assessing protein abundance, contaminants and postâ€translational modifications. Proteomics, 2011, 11, 1720-1733.	1.3	63
40	Identification of intraâ€•and intermolecular disulphide bonding in the plant mitochondrial proteome by diagonal gel electrophoresis. Proteomics, 2007, 7, 4158-4170.	1.3	51
41	Selected Reaction Monitoring to Determine Protein Abundance in Arabidopsis Using the Arabidopsis Proteotypic Predictor. Plant Physiology, 2014, 164, 525-536.	2.3	48
42	Environmental stresses inhibit and stimulate different protein import pathways in plant mitochondria. FEBS Letters, 2003, 547, 125-130.	1.3	47
43	Stepwise Evolution of a Buried Inhibitor Peptide over 45 My. Molecular Biology and Evolution, 2017, 34, 1505-1516.	3.5	45
44	Components of Mitochondrial Oxidative Phosphorylation Vary in Abundance Following Exposure to Cold and Chemical Stresses. Journal of Proteome Research, 2012, 11, 3860-3879.	1.8	41
45	Functional and composition differences between mitochondrial complex II in Arabidopsis and rice are correlated with the complex genetic history of the enzyme. Plant Molecular Biology, 2010, 72, 331-342.	2.0	40
46	Cold sensitivity of mitochondrial ATP synthase restricts oxidative phosphorylation in <i>Arabidopsis thaliana</i>. New Phytologist, 2019, 221, 1776-1788.	3.5	40
47	Responses of the Mitochondrial Respiratory System to Low Temperature in Plants. Critical Reviews in Plant Sciences, 2017, 36, 217-240.	2.7	36
48	INTERMEDIATE CLEAVAGE PEPTIDASE55 Modifies Enzyme Amino Termini and Alters Protein Stability in Arabidopsis Mitochondria. Plant Physiology, 2015, 168, 415-427.	2.3	34
49	Can Alternative Metabolic Pathways and Shunts Overcome Salinity Induced Inhibition of Central Carbon Metabolism in Crops?. Frontiers in Plant Science, 2020, 11, 1072.	1.7	34
50	Could mitochondrial dysfunction play a role in manganese toxicity?. Environmental Toxicology and Pharmacology, 1999, 7, 49-57.	2.0	33
51	The rice mitochondria proteome and its response during development and to the environment. Frontiers in Plant Science, 2013, 4, 16.	1.7	33
52	Multiplex microâ€•respiratory measurements of <scp>A</scp>rabidopsis tissues. New Phytologist, 2013, 200, 922-932.	3.5	33
53	Assessment of Respiration in Isolated Plant Mitochondria Using Clark-Type Electrodes. Methods in Molecular Biology, 2015, 1305, 165-185.	0.4	32
54	A family of small, cyclic peptides buried in preproalbumin since the Eocene epoch. Plant Direct, 2018, 2, e00042.	0.8	32

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55	Plant Mitochondrial Proteomics. Methods in Molecular Biology, 2014, 1072, 499-525.	0.4	28
56	Disruption of<i>ptLPD1</i>or<i>ptLPD2</i>, Genes That Encode Isoforms of the Plastidial Lipoamide Dehydrogenase, Confers Arsenate Hypersensitivity in Arabidopsis Â Â. Plant Physiology, 2010, 153, 1385-1397.	2.3	27
57	Analysis of the sodium chlorideâ€dependent respiratory kinetics of wheat mitochondria reveals differential effects on phosphorylating and nonâ€phosphorylating electron transport pathways. Plant, Cell and Environment, 2016, 39, 823-833.	2.8	27
58	The metabolic acclimation of <i>Arabidopsis thaliana</i> to arsenate is sensitized by the loss of mitochondrial LIPOAMIDE DEHYDROGENASE2, a key enzyme in oxidative metabolism. Plant, Cell and Environment, 2014, 37, 684-695.	2.8	25
59	Application of selected reaction monitoring mass spectrometry to field-grown crop plants to allow dissection of the molecular mechanisms of abiotic stress tolerance. Frontiers in Plant Science, 2013, 4, 20.	1.7	22
60	Subcellular proteomicsâ€”where cell biology meets protein chemistry. Frontiers in Plant Science, 2014, 5, 55.	1.7	20
61	Elucidating the Inability of Functionalized Nanoparticles to Cross the Bloodâ€“Brain Barrier and Target Specific Cells in Vivo. ACS Applied Materials & Interfaces, 2019, 11, 22085-22095.	4.0	18
62	Dielâ€•and temperatureâ€driven variation of leaf dark respiration rates and metabolite levels in rice. New Phytologist, 2020, 228, 56-69.	3.5	18
63	An Ancient Peptide Family Buried within Vicilin Precursors. ACS Chemical Biology, 2019, 14, 979-993.	1.6	17
64	Arabidopsis Organelle Isolation and Characterization. Methods in Molecular Biology, 2014, 1062, 551-572.	0.4	16
65	The Protein Corona of PEGylated PGMA-Based Nanoparticles is Preferentially Enriched with Specific Serum Proteins of Varied Biological Function. Langmuir, 2017, 33, 12926-12933.	1.6	16
66	Early Events in Plastid Protein Degradation in <i>stay-green</i><i>Arabidopsis</i> Reveal Differential Regulation beyond the Retention of LHCII and Chlorophyll. Journal of Proteome Research, 2012, 11, 5443-5452.	1.8	15
67	Diverse cyclic seed peptides in the Mexican zinnia (Zinnia haageana). Biopolymers, 2016, 106, 806-817.	1.2	13
68	Current status of the multinational Arabidopsis community. Plant Direct, 2020, 4, e00248.	0.8	13
69	Oxidative Stress and Plant Mitochondria. Methods in Molecular Biology, 2007, 372, 389-403.	0.4	13
70	Protein corona formation moderates the release kinetics of ion channel antagonists from transferrin-functionalized polymeric nanoparticles. RSC Advances, 2020, 10, 2856-2869.	1.7	11
71	Opportunities for wheat proteomics to discover the biomarkers for respiration-dependent biomass production, stress tolerance and cytoplasmic male sterility. Journal of Proteomics, 2016, 143, 36-44.	1.2	10
72	Distinct salinity-induced changes in wheat metabolic machinery in different root tissue types. Journal of Proteomics, 2022, 256, 104502.	1.2	10

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73	We Are Not Alone: The iMOP Initiative and Its Roles in a Biology- and Disease-Driven Human Proteome Project. Journal of Proteome Research, 2017, 16, 4273-4280.	1.8	8
74	Plant Mitochondrial Proteomics. Methods in Molecular Biology, 2015, 1305, 83-106.	0.4	7
75	The Isolation of Plant Organelles and Structures in the Post-genomic Era. Methods in Molecular Biology, 2017, 1511, 1-11.	0.4	7
76	Editorial for Special Issue â€œPlant Mitochondriaâ€. International Journal of Molecular Sciences, 2018, 19, 3849.	1.8	7
77	Pursuing the identification of O₂deprivation survival mechanisms in plants related to selective mRNA translation, hormone-independent cellular elongation and preparation for the arrival of oxygen. Plant Signaling and Behavior, 2011, 6, 1612-1615.	1.2	6
78	Isolation of Mitochondria from Model and Crop Plants. Methods in Molecular Biology, 2017, 1670, 115-142.	0.4	5
79	Proteomic profiling of mature leaves from oil palm (Elaeis guineensisJacq.). Electrophoresis, 2017, 38, 1147-1153.	1.3	4
80	Isolation of Mitochondria, Their Sub-Organellar Compartments, and Membranes. Methods in Molecular Biology, 2017, 1511, 83-96.	0.4	4
81	The Plant Mitochondrial Proteome Composition and Stress Response: Conservation and Divergence Between Monocots and Dicots. , 2011, , 207-239.		4
82	Long bugs to short plants â€“ the Lon protease in protein stability and thermotolerance. New Phytologist, 2009, 181, 505-508.	3.5	2
83	Assessment of Mitochondrial Protein Composition and Purity by Mass Spectroscopy. Methods in Molecular Biology, 2022, 2363, 121-152.	0.4	0
84	MITOCHONDRIAL BIOCHEMISTRY. , 0, , 227-268.		0
85	Inhibition of mitochondrial succinate oxidation by antipsychotic medication. Veterinary and Human Toxicology, 2000, 42, 209-11.	0.3	0
86	Development and Governance of FAIR Thresholds for a Data Federation. Data Science Journal, 2022, 21, .	0.6	0