Ian M MÃ¸ller

List of Publications by Year
in descending order

109 papers	9,568 citations	61984 43 h-index	38395 95 g-index
112 all docs	112 docs citations	112 times ranked	9336 citing authors

#	Article	IF	Citations
1	Assessment of Respiratory Enzymes in Intact Cells by Permeabilization with Alamethicin. Methods in Molecular Biology, 2022, 2363, 77-84.	0.9	2
2	Isolation of Highly Purified, Intact, and Functional Mitochondria from Potato Tubers Using a Two-in-One Percoll Density Gradient. Methods in Molecular Biology, 2022, 2363, 39-50.	0.9	1
3	Measuring the Activity of DNA Repair Enzymes in Isolated. Methods in Molecular Biology, 2022, 2363, 321-334.	0.9	2
4	Integrity Assessment of Isolated Plant. Methods in Molecular Biology, 2022, 2363, 51-62.	0.9	0
5	Genes from oxidative phosphorylation complexes II-V and two dual-function subunits of complex I are transcribed in Viscum album despite absence of the entire mitochondrial holo-complex I. Mitochondrion, 2022, 62, 1-12.	3.4	7
6	Nitric oxide regulation of plant metabolism. Molecular Plant, 2022, 15, 228-242.	8.3	61
7	MULocDeep: A deep-learning framework for protein subcellular and suborganellar localization prediction with residue-level interpretation. Computational and Structural Biotechnology Journal, 2021, 19, 4825-4839.	4.1	43
8	Insights into triterpene synthesis and unsaturated fatty-acid accumulation provided by chromosomal-level genome analysis of Akebia trifoliata subsp. australis. Horticulture Research, 2021, 8, 33.	6.3	23
9	Mutations of the Genomes Uncoupled 4 Gene Cause ROS Accumulation and Repress Expression of Peroxidase Genes in Rice. Frontiers in Plant Science, 2021, 12, 682453.	3.6	9
10	Plant mitochondria â€" past, present and future. Plant Journal, 2021, 108, 912-959.	5.7	94
11	Expression of starch-binding factor CBM20 in barley plastids controls the number of starch granules and the level of CO2 fixation. Journal of Experimental Botany, 2020, 71, 234-246.	4.8	3
12	Redox-mediated kick-start of mitochondrial energy metabolism drives resource-efficient seed germination. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 741-751.	7.1	96
13	Matrix Redox Physiology Governs the Regulation of Plant Mitochondrial Metabolism through Posttranslational Protein Modifications. Plant Cell, 2020, 32, 573-594.	6.6	70
14	The Mitogenome of Norway Spruce and a Reappraisal of Mitochondrial Recombination in Plants. Genome Biology and Evolution, 2020, 12, 3586-3598.	2.5	35
15	Proteomic and Bioinformatic Profiling of Transporters in Higher Plant Mitochondria. Biomolecules, 2020, 10, 1190.	4.0	10
16	The effect of phytoglobin overexpression on the plant proteome during nonhost response of barley (Hordeum vulgare) to wheat powdery mildew (Blumeria graminis f. sp. tritici). Scientific Reports, 2020, 10, 9192.	3.3	2
17	Preface. Mitochondrion, 2020, 54, 133-135.	3.4	0
18	Mitochondria in parasitic plants. Mitochondrion, 2020, 52, 173-182.	3.4	28

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19	DNA repair in plant mitochondriaÂâ€"Âa complete base excision repair pathway in potato tuber mitochondria. Physiologia Plantarum, 2019, 166, 494-512.	5.2	16
20	Shortâ€term high temperature treatment reduces viability and inhibits respiration and DNA repair enzymes inAraucaria angustifoliacells. Physiologia Plantarum, 2019, 166, 513-524.	5.2	6
21	Overexpression of phytoglobin in barley alters both compatible and incompatible interactions with the mildew pathogen Blumeria graminis. Plant Pathology, 2019, 68, 152-162.	2.4	5
22	Copper ion / H2O2 oxidation of Cu/Zn-Superoxide dismutase: Implications for enzymatic activity and antioxidant action. Redox Biology, 2019, 26, 101262.	9.0	31
23	A Suppressor Mutation Partially Reverts the xantha Trait via Lowered Methylation in the Promoter of Genomes Uncoupled 4 in Rice. Frontiers in Plant Science, 2019, 10, 1003.	3.6	14
24	CarbonylDB: a curated data-resource of protein carbonylation sites. Bioinformatics, 2018, 34, 2518-2520.	4.1	17
25	Changes in the mitochondrial proteome of developing maize seed embryos. Physiologia Plantarum, 2018, 163, 552-572.	5.2	5
26	Early events in copper-ion catalyzed oxidation of Î±-synuclein. Free Radical Biology and Medicine, 2018, 121, 38-50.	2.9	23
27	Evaluation of sample preparation methods for mass spectrometry-based proteomic analysis of barley leaves. Plant Methods, 2018, 14, 72.	4.3	31
28	Î±-Synucleins from Animal Species Show Low Fibrillation Propensities and Weak Oligomer Membrane Disruption. Biochemistry, 2018, 57, 5145-5158.	2.5	15
29	MU-LOC: A Machine-Learning Method for Predicting Mitochondrially Localized Proteins in Plants. Frontiers in Plant Science, 2018, 9, 634.	3.6	29
30	A biotin enrichment strategy identifies novel carbonylated amino acids in proteins from human plasma. Journal of Proteomics, 2017, 156, 40-51.	2.4	25
31	The proteome of higher plant mitochondria. Mitochondrion, 2017, 33, 22-37.	3.4	71
32	ATP sensing in living plant cells reveals tissue gradients and stress dynamics of energy physiology. ELife, 2017, 6, .	6.0	125
33	Proteomic Analysis Reveals Different Involvement of Embryo and Endosperm Proteins during Aging of Yliangyou 2 Hybrid Rice Seeds. Frontiers in Plant Science, 2016, 7, 1394.	3.6	34
34	What is hot in plant mitochondria?. Physiologia Plantarum, 2016, 157, 256-263.	5.2	28
35	Identification of embryo proteins associated with seed germination and seedling establishment in germinating rice seeds. Journal of Plant Physiology, 2016, 196-197, 79-92.	3.5	17
36	Massive gene loss in mistletoe (Viscum, Viscaceae) mitochondria. Scientific Reports, 2015, 5, 17588.	3.3	90

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37	Proteome Analysis of Poplar Seed Vigor. PLoS ONE, 2015, 10, e0132509.	2.5	31
38	Mitochondrial metabolism is regulated by thioredoxin. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3180-3181.	7.1	8
39	Proteomic Analysis of Lettuce Seed Germination and Thermoinhibition by Sampling of Individual Seeds at Germination and Removal of Storage Proteins by Polyethylene Glycol Fractionation. Plant Physiology, 2015, 167, 1332-1350.	4.8	23
40	Proteomics of seed development, desiccation tolerance, germination and vigor. Plant Physiology and Biochemistry, 2015, 86, 1-15.	5.8	116
41	Barth Syndrome: From Mitochondrial Dysfunctions Associated with Aberrant Production of Reactive Oxygen Species to Pluripotent Stem Cell Studies. Frontiers in Genetics, 2015, 6, 359.	2.3	73
42	The Potato Tuber Mitochondrial Proteome Â Â. Plant Physiology, 2014, 164, 637-653.	4.8	122
43	The function of glycine decarboxylase complex is optimized to maintain high photorespiratory flux via buffering of its reaction products. Mitochondrion, 2014, 19, 357-364.	3.4	47
44	Genetics and biology of cytoplasmic male sterility and its applications in forage and turf grass breeding. Plant Breeding, 2014, 133, 299-312.	1.9	22
45	Biochemistry, proteomics, and phosphoproteomics of plant mitochondria from non-photosynthetic cells. Frontiers in Plant Science, 2013, 4, 51.	3.6	32
46	Intracellular Signaling by Diffusion: Can Waves of Hydrogen Peroxide Transmit Intracellular Information in Plant Cells?. Frontiers in Plant Science, 2012, 3, 295.	3.6	44
47	Large-scale analysis of phosphorylation site occupancy in eukaryotic proteins. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 405-412.	2.3	13
48	Terrestrial plant methane production and emission. Physiologia Plantarum, 2012, 144, 201-209.	5.2	97
49	Protein carbonylation and metal-catalyzed protein oxidation in a cellular perspective. Journal of Proteomics, 2011, 74, 2228-2242.	2.4	213
50	Mitochondrial Electron Transport and Plant Stress. , 2011, , 357-381.		21
51	ROS signalling â€“ specificity is required. Trends in Plant Science, 2010, 15, 370-374.	8.8	352
52	Monitoring reactive oxygen species formation and localisation in living cells by use of the fluorescent probe CMâ€H₂DCFDA and confocal laser microscopy. Physiologia Plantarum, 2009, 136, 369-383.	5.2	117
53	The multiplicity of dehydrogenases in the electron transport chain of plant mitochondria. Mitochondrion, 2008, 8, 47-60.	3.4	281
54	Oxidative Modifications to Cellular Components in Plants. Annual Review of Plant Biology, 2007, 58, 459-481.	18.7	1,545

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55	Specific Aquaporins Facilitate the Diffusion of Hydrogen Peroxide across Membranes. Journal of Biological Chemistry, 2007, 282, 1183-1192.	3.4	1,086
56	Protein oxidation in plant mitochondria detected as oxidized tryptophan. Free Radical Biology and Medicine, 2006, 40, 430-435.	2.9	77
57	The Free NADH Concentration Is Kept Constant in Plant Mitochondria under Different Metabolic Conditions. Plant Cell, 2006, 18, 688-698.	6.6	84
58	The role of alternative oxidase in modulating carbon use efficiency and growth during macronutrient stress in tobacco cells. Journal of Experimental Botany, 2005, 56, 1499-1515.	4.8	160
59	Modelling NADH turnover in plant mitochondria. Physiologia Plantarum, 2004, 120, 370-385.	5.2	34
60	Identification of oxidised proteins in the matrix of rice leaf mitochondria by immunoprecipitation and two-dimensional liquid chromatography-tandem mass spectrometry. Phytochemistry, 2004, 65, 1839-1851.	2.9	151
61	Oxidation and reduction of pyridine nucleotides in alamethicin-permeabilized plant mitochondria. Biochemical Journal, 2004, 380, 193-202.	3.7	40
62	Identification of 14 new phosphoproteins involved in important plant mitochondrial processes. FEBS Letters, 2003, 540, 141-146.	2.8	120
63	Phosphorylation of Formate Dehydrogenase in Potato Tuber Mitochondria. Journal of Biological Chemistry, 2003, 278, 26021-26030.	3.4	84
64	PLANTMITOCHONDRIA ANDOXIDATIVESTRESS: Electron Transport, NADPH Turnover, and Metabolism of Reactive Oxygen Species. Annual Review of Plant Biology, 2001, 52, 561-591.	14.3	1,481
65	Involvement of matrix NADP turnover in the oxidation of NAD+-linked substrates by pea leaf mitochondria. Physiologia Plantarum, 2001, 111, 448-456.	5.2	30
66	Redox enzymes in the plant plasma membrane and their possible roles. Plant, Cell and Environment, 2000, 23, 1287-1302.	5.7	69
67	Identification of the site where the electron transfer chain of plant mitochondria is stimulated by electrostatic charge screening. FEBS Journal, 2000, 267, 869-876.	0.2	20
68	Protein phosphorylation/dephosphorylation in the inner membrane of potato tuber mitochondria. FEBS Letters, 2000, 475, 213-217.	2.8	42
69	Two Separate Transhydrogenase Activities Are Present in Plant Mitochondria. Biochemical and Biophysical Research Communications, 1999, 265, 106-111.	2.1	39
70	Characterization and solubilization of residual redox activity in salt-washed and detergent-treated plasma membrane vesicles from spinach leaves. Protoplasma, 1998, 205, 59-65.	2.1	5
71	The role of NADP in the mitochondrial matrix. Trends in Plant Science, 1998, 3, 21-27.	8.8	113
72	NADH-Monodehydroascorbate Oxidoreductase Is One of the Redox Enzymes in Spinach Leaf Plasma Membranes1. Plant Physiology, 1998, 116, 1029-1036.	4.8	82

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73	The oxidation of cytosolic NAD(P)H by external NAD(P)H dehydrogenases in the respiratory chain of plant mitochondria. Physiologia Plantarum, 1997, 100, 85-90.	5.2	41
74	Evidence for the presence of two rotenone-insensitive NAD(P)H dehydrogenases on the inner surface of the inner membrane of potato tuber mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1996, 1276, 133-139.	1.0	59
75	Platanetin and 7-iodo-acridone-4-carboxylic acid are not specific inhibitors of respiratory NAD(P)H dehydrogenases in potato tuber mitochondria. Physiologia Plantarum, 1996, 96, 263-267.	5.2	6
76	Direct evidence for the presence of two external NAD(P)H dehydrogenases coupled to the electron transport chain in plant mitochondria. FEBS Letters, 1995, 373, 307-309.	2.8	60
77	A leucine motif in the amino acid sequence of subunit 9 of the mitochondrial ATPase, and other hydrophobic membrane proteins, that is highly conserved by editing. FEBS Letters, 1994, 354, 245-247.	2.8	4
78	NAD(P)H-ubiquinone oxidoreductases in plant mitochondria. Journal of Bioenergetics and Biomembranes, 1993, 25, 377-384.	2.3	80
79	The presence of a short redox chain in the membrane of intact potato tuber peroxisomes and the association of malate dehydrogenase with the peroxisomal membrane. Physiologia Plantarum, 1993, 88, 19-28.	5.2	73
80	Control of the activity of plant plasma membrane MgATPase by the viscosity of the aqueous phase. Physiologia Plantarum, 1993, 89, 409-415.	5.2	5
81	NAD(P)H dehydrogenases on the inner surface of the inner mitochondrial membrane studied using inside-out submitochondrial particles. Physiologia Plantarum, 1991, 83, 357-365.	5.2	89
82	Protein synthesis in mitochondria purified from roots, leaves and flowers of sugar beet. Physiologia Plantarum, 1991, 83, 7-16.	5.2	29
83	Effect of calcium ions and inhibitors on internal NAD(P)H dehydrogenases in plant mitochondria. FEBS Journal, 1991, 202, 617-623.	0.2	48
84	Modulation of endogenous protein phosphorylation in plant mitochondria by respiratory substrates. Physiologia Plantarum, 1990, 80, 493-499.	5.2	14
85	NADP-Utilizing Enzymes in the Matrix of Plant Mitochondria. Plant Physiology, 1990, 94, 1012-1018.	4.8	123
86	Component of the alternative oxidase localized to the matrix surface of the inner membrane of plant mitochondria. FEBS Letters, 1990, 259, 311-314.	2.8	24
87	On the presence of inside-out plasma membrane vesicles and vanadate-inhibited K+,Mg2+-ATPase in microsomal fractions from wheat and maize roots. Physiologia Plantarum, 1989, 77, 12-19.	5.2	28
88	Measurement of the activity and capacity of the alternative pathway in intact plant tissues: Identification of problems and possible solutions. Physiologia Plantarum, 1988, 72, 642-649.	5.2	184
89	The organization of biological membranes. Physiologia Plantarum, 1988, 73, 153-157.	5.2	3
90	[41] Isolation of submitochondrial particles with different polarities. Methods in Enzymology, 1987, , 442-453.	1.0	47

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91	Mg2+-ATPase activity in wheat root plasma membrane vesicles: Time-dependence and effect of sucrose and detergents. Physiologia Plantarum, 1987, 70, 583-589.	5.2	15
92	K+ uptake in plant roots: Experimental approach and influx models. Physiologia Plantarum, 1987, 70, 743-748.	5.2	29
93	NAD(P)H oxidase and peroxidase activities in purified plasma membranes from cauliflower inflorescences. Physiologia Plantarum, 1987, 71, 9-19.	5.2	94
94	Free space uptake and influx of Ni2+ in excised barley roots. Physiologia Plantarum, 1986, 68, 583-588.	5.2	17
95	NADH dehydrogenases in plant mitochondria. Physiologia Plantarum, 1986, 67, 517-520.	5.2	18
96	Comparison of the properties of plasmalemma vesicles purified from wheat roots by phase partitioning and by discontinuous sucrose gradient centrifugation. Physiologia Plantarum, 1986, 68, 59-66.	5.2	38
97	Salicylhydroxamic acid-stimulated NADH oxidation by purified plasmalemma vesicles from wheat roots. Physiologia Plantarum, 1986, 68, 67-74.	5.2	52
98	Electrostatic surface properties of plasmalemma vesicles from oat and wheat roots. Ion binding and screening investigated by 9-aminoacridine fluorescence. Planta, 1985, 164, 354-361.	3.2	21
99	A fluorescent compound in oat root plasma membrane. Physiologia Plantarum, 1985, 64, 461-467.	5.2	2
100	Generation and purification of submitochondrial particles of different polarities from plant mitochondria. FEBS Letters, 1985, 193, 169-174.	2.8	27
101	Oxygen consumption by purified plasmalemma vesicles from wheat roots. FEBS Letters, 1985, 193, 180-184.	2.8	41
102	The subcellular distribution of carotenoids in light-grown Verticillium agaricinum. Physiologia Plantarum, 1984, 62, 167-174.	5.2	1
103	A model for cation content of plants based on surface potentials and surface charge densities of plant membranes. Physiologia Plantarum, 1984, 61, 529-534.	5.2	7
104	The surface charge density of wheat root membranes. Physiologia Plantarum, 1984, 61, 535-540.	5.2	19
105	The negative surface charge density of plasmalemma vesicles from wheat and oat roots. FEBS Letters, 1984, 167, 181-185.	2.8	56
106	A novel method for assessing energization of plant mitochondria. Biochemical Society Transactions, 1983, 11, 755-756.	3.4	1
107	Regulation of malate oxidation in plant mitochondria. Response to rotenone and exogenous NAD+. Biochemical Journal, 1982, 208, 703-711.	3.1	55
108	Direct evidence for the presence of a rotenone-resistant NADH dehydrogenase on the inner surface of the inner membrane of plant mitochondria. Physiologia Plantarum, 1982, 54, 267-274.	5.2	126

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109	A specific role for Ca2+ in the oxidation of exogenous NADH by Jerusalem-artichoke (<i>Helianthus) Tj ETQq1 1 0.784314 rgBT /Overlo	3.1	88