Michael Schroda

List of Publications by Year
in descending order

90 papers	8,540 citations	66343 42 h-index	49909 87 g-index
104 all docs	104 docs citations	104 times ranked	8516 citing authors

#	Article	IF	Citations
1	Complexome profiling on the Chlamydomonas lpa2 mutant reveals insights into PSII biogenesis and new PSII associated proteins. Journal of Experimental Botany, 2022, 73, 245-262.	4.8	18
2	Multiple knockout mutants reveal a high redundancy of phytotoxic compounds contributing to necrotrophic pathogenesis of Botrytis cinerea. PLoS Pathogens, 2022, 18, e1010367.	4.7	45
3	A longer isoform of Stim1 is a negative SOCE regulator but increases cAMPâ€modulated NFAT signaling. EMBO Reports, 2022, 23, e53135.	4.5	13
4	New destination vectors facilitate Modular Cloning for Chlamydomonas. Current Genetics, 2022, , 1.	1.7	6
5	Systems-wide analysis revealed shared and unique responses to moderate and acute high temperatures in the green alga Chlamydomonas reinhardtii. Communications Biology, 2022, 5, 460.	4.4	16
6	Parkinson mice show functional and molecular changes in the gut long before motoric disease onset. Molecular Neurodegeneration, 2021, 16, 34.	10.8	29
7	Real-time monitoring of subcellular H2O2 distribution in Chlamydomonas reinhardtii. Plant Cell, 2021, 33, 2935-2949.	6.6	50
8	Structural basis for VIPP1 oligomerization and maintenance of thylakoid membrane integrity. Cell, 2021, 184, 3643-3659.e23.	28.9	76
9	In Vivo Structure-Function Analysis and Redox Interactomes of Leishmania tarentolae Erv. Microbiology Spectrum, 2021, 9, e0080921.	3.0	4
10	Acclimation in plants â€“ the Green Hub consortium. Plant Journal, 2021, 106, 23-40.	5.7	44
11	The cryo-EM structure of the chloroplast ClpP complex. Nature Plants, 2021, 7, 1505-1515.	9.3	5
12	The NADH Dehydrogenase Nde1 Executes Cell Death after Integrating Signals from Metabolism and Proteostasis on the Mitochondrial Surface. Molecular Cell, 2020, 77, 189-202.e6.	9.7	39
13	Vernalization Alters Sink and Source Identities and Reverses Phloem Translocation from Taproots to Shoots in Sugar Beet. Plant Cell, 2020, 32, 3206-3223.	6.6	30
14	An epigenetic gene silencing pathway selectively acting on transgenic DNA in the green alga Chlamydomonas. Nature Communications, 2020, 11, 6269.	12.8	58
15	Phosphoinositides regulate chloroplast processes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9154-9156.	7.1	4
16	Overexpression of Sedoheptulose-1,7-Bisphosphatase Enhances Photosynthesis in Chlamydomonas reinhardtii and Has No Effect on the Abundance of Other Calvin-Benson Cycle Enzymes. Frontiers in Plant Science, 2020, 11, 868.	3.6	41
17	VIPP2 interacts with VIPP1 and HSP22E/F at chloroplast membranes and modulates a retrograde signal for HSP22E/F gene expression. Plant, Cell and Environment, 2020, 43, 1212-1229.	5.7	25
18	Identification of Chloroplast Envelope Proteins with Critical Importance for Cold Acclimation. Plant Physiology, 2020, 182, 1239-1255.	4.8	33

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19	VIPP1 rods engulf membranes containing phosphatidylinositol phosphates. Scientific Reports, 2019, 9, 8725.	3.3	35
20	Metabolic Engineering of Corynebacterium glutamicum for Highâ€Level Ectoine Production: Design, Combinatorial Assembly, and Implementation of a Transcriptionally Balanced Heterologous Ectoine Pathway. Biotechnology Journal, 2019, 14, e1800417.	3.5	61
21	Heteroâ€oligomeric CPN60 resembles highly symmetric groupâ€I chaperonin structure revealed by Cryoâ€EM. Plant Journal, 2019, 98, 798-812.	5.7	15
22	The Chlamydomonas deg1c Mutant Accumulates Proteins Involved in High Light Acclimation. Plant Physiology, 2019, 181, 1480-1497.	4.8	24
23	Good News for Nuclear Transgene Expression in Chlamydomonas. Cells, 2019, 8, 1534.	4.1	69
24	The Role of Plastidic Trigger Factor Serving Protein Biogenesis in Green Algae and Land Plants. Plant Physiology, 2019, 179, 1093-1110.	4.8	22
25	Artificial Intelligence Understands Peptide Observability and Assists With Absolute Protein Quantification. Frontiers in Plant Science, 2018, 9, 1559.	3.6	31
26	Absolute Quantification of Major Photosynthetic Protein Complexes in Chlamydomonas reinhardtii Using Quantification Concatamers (QconCATs). Frontiers in Plant Science, 2018, 9, 1265.	3.6	52
27	Birth of a Photosynthetic Chassis: A MoClo Toolkit Enabling Synthetic Biology in the Microalga Chlamydomonas reinhardtii. ACS Synthetic Biology, 2018, 7, 2074-2086.	3.8	225
28	Investigations on <scp>VELVET</scp> regulatory mutants confirm the role of host tissue acidification and secretion of proteins in the pathogenesis of Botrytis cinerea. New Phytologist, 2018, 219, 1062-1074.	7.3	76
29	Effects of microcompartmentation on flux distribution and metabolic pools in Chlamydomonas reinhardtii chloroplasts. ELife, 2018, 7, .	6.0	37
30	Substrates of the chloroplast small heat shock proteins 22E/F point to thermolability as a regulative switch for heat acclimation in Chlamydomonas reinhardtii. Plant Molecular Biology, 2017, 95, 579-591.	3.9	26
31	Not changes in membrane fluidity but proteotoxic stress triggers heat shock protein expression in <scp>Chlamydomonas reinhardtii</scp>. Plant, Cell and Environment, 2017, 40, 2987-3001.	5.7	33
32	A repeat protein links Rubisco to form the eukaryotic carbon-concentrating organelle. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5958-5963.	7.1	196
33	Proteomic profiling of the mitochondrial ribosome identifies Atp25 as a composite mitochondrial precursor protein. Molecular Biology of the Cell, 2016, 27, 3031-3039.	2.1	25
34	Revisiting the photosystem II repair cycle. Plant Signaling and Behavior, 2016, 11, e1218587.	2.4	138
35	A disulfide bond in the TIM23 complex is crucial for voltage gating and mitochondrial protein import. Journal of Cell Biology, 2016, 214, 417-431.	5.2	48
36	PETOÂInteracts with Other Effectors of Cyclic Electron Flow in Chlamydomonas. Molecular Plant, 2016, 9, 558-568.	8.3	34

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37	GUN1 Controls Accumulation of the Plastid Ribosomal Protein S1 at the Protein Level and Interacts with Proteins Involved in Plastid Protein Homeostasis. Plant Physiology, 2016, 170, 1817-1830.	4.8	100
38	TEF30 Interacts with Photosystem II Monomers and Is Involved in the Repair of Photodamaged Photosystem II in Chlamydomonas reinhardtii. Plant Physiology, 2016, 170, 821-840.	4.8	18
39	The Chlamydomonas heat stress response. Plant Journal, 2015, 82, 466-480.	5.7	110
40	Dissecting the contributions of <scp>GC</scp> content and codon usage to gene expression in the model alga Chlamydomonas reinhardtii. Plant Journal, 2015, 84, 704-717.	5.7	113
41	ATP-dependent molecular chaperones in plastids â€" More complex than expected. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 872-888.	1.0	63
42	Redox-regulated dynamic interplay between Cox19 and the copper-binding protein Cox11 in the intermembrane space of mitochondria facilitates biogenesis of cytochromecoxidase. Molecular Biology of the Cell, 2015, 26, 2385-2401.	2.1	56
43	Identification of the transporter responsible for sucrose accumulation in sugar beet taproots. Nature Plants, 2015, 1, 14001.	9.3	141
44	InÂvitro characterization of bacterial and chloroplast Hsp70 systems reveals an evolutionary optimization of the co-chaperones for their Hsp70 partner. Biochemical Journal, 2014, 460, 13-24.	3.7	18
45	Systems-Wide Analysis of Acclimation Responses to Long-Term Heat Stress and Recovery in the Photosynthetic Model OrganismChlamydomonas reinhardtiiÂ Â. Plant Cell, 2014, 26, 4270-4297.	6.6	107
46	<scp>M</scp>ercator: a fast and simple web server for genome scale functional annotation of plant sequence data. Plant, Cell and Environment, 2014, 37, 1250-1258.	5.7	575
47	Systems Analysis of the Response of Photosynthesis, Metabolism, and Growth to an Increase in Irradiance in the Photosynthetic Model Organism Chlamydomonas reinhardtii Â Â Â. Plant Cell, 2014, 26, 2310-2350.	6.6	123
48	Conditional Depletion of the Chlamydomonas Chloroplast ClpP Protease Activates Nuclear Genes Involved in Autophagy and Plastid Protein Quality Control. Plant Cell, 2014, 26, 2201-2222.	6.6	122
49	Nitrogen-Sparing Mechanisms in Chlamydomonas Affect the Transcriptome, the Proteome, and Photosynthetic Metabolism. Plant Cell, 2014, 26, 1410-1435.	6.6	314
50	Identification and Validation of Protein-Protein Interactions by Combining Co-immunoprecipitation, Antigen Competition, and Stable Isotope Labeling. Methods in Molecular Biology, 2014, 1188, 245-261.	0.9	10
51	Rationales and Approaches for Studying Metabolism in Eukaryotic Microalgae. Metabolites, 2014, 4, 184-217.	2.9	18
52	Molecular Chaperone Functions in Plastids. , 2014, , 325-357.		0
53	Heat shock factor 1 counteracts epigenetic silencing of nuclear transgenes in Chlamydomonas reinhardtii. Nucleic Acids Research, 2013, 41, 5273-5289.	14.5	51
54	Dissecting the Heat Stress Response in Chlamydomonas by Pharmaceutical and RNAi Approaches Reveals Conserved and Novel Aspects. Molecular Plant, 2013, 6, 1795-1813.	8.3	39

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55	A role of VIPP1 as a dynamic structure within thylakoid centers as sites of photosystem biogenesis?. Plant Signaling and Behavior, 2013, 8, e27037.	2.4	34
56	A Protocol for the Identification of Protein-protein Interactions Based on ¹⁵N Metabolic Labeling, Immunoprecipitation, Quantitative Mass Spectrometry and Affinity Modulation. Journal of Visualized Experiments, 2012, , .	0.3	3
57	Evidence for a Role of VIPP1 in the Structural Organization of the Photosynthetic Apparatus in Chlamydomonas. Plant Cell, 2012, 24, 637-659.	6.6	104
58	Protocol: methodology for chromatin immunoprecipitation (ChIP) in Chlamydomonas reinhardtii. Plant Methods, 2011, 7, 35.	4.3	21
59	Quantitative Shotgun Proteomics Using a Uniform 15N-Labeled Standard to Monitor Proteome Dynamics in Time Course Experiments Reveals New Insights into the Heat Stress Response of Chlamydomonas reinhardtii. Molecular and Cellular Proteomics, 2011, 10, M110.004739.	3.8	83
60	Transcription Factorâ€“Dependent Chromatin Remodeling at Heat Shock and Copper-Responsive Promoters in Chlamydomonas reinhardtii Â Â. Plant Cell, 2011, 23, 2285-2301.	6.6	64
61	Chloroplast DnaJ-like proteins 3 and 4 (CDJ3/4) from Chlamydomonas reinhardtii contain redox-active Feâ€“S clusters and interact with stromal HSP70B. Biochemical Journal, 2010, 427, 205-215.	3.7	30
62	An inducible artificial microRNA system for Chlamydomonas reinhardtii confirms a key role for heat shock factor 1 in regulating thermotolerance. Current Genetics, 2010, 56, 383-389.	1.7	69
63	Chlorophyll-deficient mutants of Chlamydomonas reinhardtii that accumulate magnesium protoporphyrin IX. Plant Molecular Biology, 2010, 72, 643-658.	3.9	34
64	New Insights into the Roles of Molecular Chaperones in Chlamydomonas and Volvox. International Review of Cell and Molecular Biology, 2010, 285, 75-113.	3.2	21
65	Chaperones and Proteases. , 2009, , 671-729.		19
66	A â€˜foldosomeâ€™ in the chloroplast?. Plant Signaling and Behavior, 2009, 4, 301-303.	2.4	19
67	Application of quantitative immunoprecipitation combined with knockdown and crossâ€linking to Chlamydomonas reveals the presence of vesicleâ€inducing protein in plastids 1 in a common complex with chloroplast HSP90C. Proteomics, 2009, 9, 3079-3089.	2.2	50
68	Assistance for a Chaperone. Journal of Biological Chemistry, 2008, 283, 16363-16373.	3.4	27
69	In Vivo Targets of S-Thiolation in Chlamydomonas reinhardtii. Journal of Biological Chemistry, 2008, 283, 21571-21578.	3.4	102
70	A New Assay for Promoter Analysis in Chlamydomonas Reveals Roles for Heat Shock Elements and the TATA Box in HSP70A Promoter-Mediated Activation of Transgene Expression. Eukaryotic Cell, 2008, 7, 172-176.	3.4	50
71	The Chloroplast DnaJ Homolog CDJ1 of Chlamydomonas reinhardtii Is Part of a Multichaperone Complex Containing HSP70B, CGE1, and HSP90C. Plant Physiology, 2008, 148, 2070-2082.	4.8	56
72	The NH2-terminal Domain of the Chloroplast GrpE Homolog CGE1 Is Required for Dimerization and Cochaperone Function in Vivo. Journal of Biological Chemistry, 2007, 282, 11317-11328.	3.4	36

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73	The chloroplast HSP70B-CDJ2-CGE1 chaperones catalyse assembly and disassembly of VIPP1 oligomers in Chlamydomonas. Plant Journal, 2007, 50, 265-277.	5.7	116
74	A reporter system for the individual detection of hydrogen peroxide and singlet oxygen: its use for the assay of reactive oxygen species produced in vivo. Plant Journal, 2007, 50, 475-487.	5.7	65
75	Heat shock factor 1 is a key regulator of the stress response in Chlamydomonas. Plant Journal, 2007, 52, 286-295.	5.7	72
76	The Chlamydomonas Genome Reveals the Evolution of Key Animal and Plant Functions. Science, 2007, 318, 245-250.	12.6	2,354
77	RNA silencing in Chlamydomonas: mechanisms and tools. Current Genetics, 2006, 49, 69-84.	1.7	126
78	Identification of a plastid response element that acts as an enhancer within the Chlamydomonas HSP70A promoter. Nucleic Acids Research, 2006, 34, 4767-4779.	14.5	73
79	Analysis of Chromatin Structure in the Control Regions of the Chlamydomonas HSP70A and RBCS2 Genes. Plant Molecular Biology, 2005, 59, 501-513.	3.9	27
80	HEAT SHOCK PROTEIN 90C Is a Bona Fide Hsp90 That Interacts with Plastidic HSP70B in Chlamydomonas reinhardtii. Plant Physiology, 2005, 138, 2310-2322.	4.8	68
81	J-Domain Protein CDJ2 and HSP70B Are a Plastidic Chaperone Pair That Interacts with Vesicle-Inducing Protein in Plastids 1. Molecular Biology of the Cell, 2005, 16, 1165-1177.	2.1	115
82	The Chlamydomonas genome reveals its secrets: chaperone genes and the potential roles of their gene products in the chloroplast. Photosynthesis Research, 2004, 82, 221-240.	2.9	128
83	Cloning of nodule-specific cDNAs of Galega orientalis. Physiologia Plantarum, 2002, 114, 588-593.	5.2	23
84	Sequence elements within an HSP70 promoter counteract transcriptional transgene silencing in Chlamydomonas. Plant Journal, 2002, 31, 445-455.	5.7	112
85	The Chloroplastic GrpE Homolog of Chlamydomonas. Plant Cell, 2001, 13, 2823-2839.	6.6	98
86	The Chloroplastic GrpE Homolog of Chlamydomonas: Two Isoforms Generated by Differential Splicing. Plant Cell, 2001, 13, 2823.	6.6	0
87	The HSP70A promoter as a tool for the improved expression of transgenes in Chlamydomonas. Plant Journal, 2000, 21, 121-131.	5.7	298
88	A Chloroplast-Targeted Heat Shock Protein 70 (HSP70) Contributes to the Photoprotection and Repair of Photosystem II during and after Photoinhibition. Plant Cell, 1999, 11, 1165-1178.	6.6	282
89	Light-inducible geneHSP70B encodes a chloroplast-localized heat shock protein inChlamydomonas reinhardtii. Plant Molecular Biology, 1996, 31, 1185-1194.	3.9	63
90	Molecular Advancements Establishing Chlamydomonas as a Host for Biotechnological Exploitation. Frontiers in Plant Science, 0, 13, .	3.6	10