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	The <i>Chlamydomonas</i> Genome Reveals the Evolution of Key Animal and Plant Functions. Science, 2007, 318, 245-250.	12.6	2,354
2	<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
3	Nitrogen-Sparing Mechanisms in <i>Chlamydomonas</i> Affect the Transcriptome, the Proteome, and Photosynthetic Metabolism. Plant Cell, 2014, 26, 1410-1435.	6.6	314
4	The HSP70A promoter as a tool for the improved expression of transgenes in Chlamydomonas. Plant Journal, 2000, 21, 121-131.	5.7	298
5	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
6	Birth of a Photosynthetic Chassis: A MoClo Toolkit Enabling Synthetic Biology in the Microalga <i>Chlamydomonas reinhardtii</i>. ACS Synthetic Biology, 2018, 7, 2074-2086.	3.8	225
7	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
8	Identification of the transporter responsible for sucrose accumulation in sugar beet taproots. Nature Plants, 2015, 1, 14001.	9.3	141
9	Revisiting the photosystem II repair cycle. Plant Signaling and Behavior, 2016, 11, e1218587.	2.4	138
10	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
11	RNA silencing in Chlamydomonas: mechanisms and tools. Current Genetics, 2006, 49, 69-84.	1.7	126
12	Systems Analysis of the Response of Photosynthesis, Metabolism, and Growth to an Increase in Irradiance in the Photosynthetic Model Organism <i>Chlamydomonas reinhardtii</i> Â Â Â. Plant Cell, 2014, 26, 2310-2350.	6.6	123
13	Conditional Depletion of the <i>Chlamydomonas</i> Chloroplast ClpP Protease Activates Nuclear Genes Involved in Autophagy and Plastid Protein Quality Control. Plant Cell, 2014, 26, 2201-2222.	6.6	122
14	The chloroplast HSP70B-CDJ2-CGE1 chaperones catalyse assembly and disassembly of VIPP1 oligomers in Chlamydomonas. Plant Journal, 2007, 50, 265-277.	5.7	116
15	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
16	Dissecting the contributions of <scp>GC</scp> content and codon usage to gene expression in the model alga <i>Chlamydomonas reinhardtii</i>. Plant Journal, 2015, 84, 704-717.	5.7	113
17	Sequence elements within an HSP70 promoter counteract transcriptional transgene silencing in Chlamydomonas. Plant Journal, 2002, 31, 445-455.	5.7	112
18	The <i>Chlamydomonas</i> heat stress response. Plant Journal, 2015, 82, 466-480.	5.7	110

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19	Systems-Wide Analysis of Acclimation Responses to Long-Term Heat Stress and Recovery in the Photosynthetic Model Organism<i>Chlamydomonas reinhardtii</i>Â Â. Plant Cell, 2014, 26, 4270-4297.	6.6	107
20	Evidence for a Role of VIPP1 in the Structural Organization of the Photosynthetic Apparatus in <i>Chlamydomonas</i>. Plant Cell, 2012, 24, 637-659.	6.6	104
21	In Vivo Targets of S-Thiolation in Chlamydomonas reinhardtii. Journal of Biological Chemistry, 2008, 283, 21571-21578.	3.4	102
22	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
23	The Chloroplastic GrpE Homolog of Chlamydomonas. Plant Cell, 2001, 13, 2823-2839.	6.6	98
24	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
25	Investigations on <scp>VELVET</scp> regulatory mutants confirm the role of host tissue acidification and secretion of proteins in the pathogenesis of <i>Botrytis cinerea</i>. New Phytologist, 2018, 219, 1062-1074.	7.3	76
26	Structural basis for VIPP1 oligomerization and maintenance of thylakoid membrane integrity. Cell, 2021, 184, 3643-3659.e23.	28.9	76
27	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
28	Heat shock factor 1 is a key regulator of the stress response in <i>Chlamydomonas</i>. Plant Journal, 2007, 52, 286-295.	5.7	72
29	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
30	Good News for Nuclear Transgene Expression in Chlamydomonas. Cells, 2019, 8, 1534.	4.1	69
31	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
32	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
33	Transcription Factorâ€"Dependent Chromatin Remodeling at Heat Shock and Copper-Responsive Promoters in <i>Chlamydomonas reinhardtii</i> Â Â. Plant Cell, 2011, 23, 2285-2301.	6.6	64
34	Light-inducible geneHSP70B encodes a chloroplast-localized heat shock protein inChlamydomonas reinhardtii. Plant Molecular Biology, 1996, 31, 1185-1194.	3.9	63
35	ATP-dependent molecular chaperones in plastids â€" More complex than expected. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 872-888.	1.0	63
36	Metabolic Engineering of <i>Corynebacterium glutamicum</i> 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

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37	An epigenetic gene silencing pathway selectively acting on transgenic DNA in the green alga Chlamydomonas. Nature Communications, 2020, 11, 6269.	12.8	58
38	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
39	Redox-regulated dynamic interplay between Cox19 and the copper-binding protein Cox11 in the intermembrane space of mitochondria facilitates biogenesis of cytochrome<i>c</i>oxidase. Molecular Biology of the Cell, 2015, 26, 2385-2401.	2.1	56
40	Absolute Quantification of Major Photosynthetic Protein Complexes in Chlamydomonas reinhardtii Using Quantification Concatamers (QconCATs). Frontiers in Plant Science, 2018, 9, 1265.	3.6	52
41	Heat shock factor 1 counteracts epigenetic silencing of nuclear transgenes in Chlamydomonas reinhardtii. Nucleic Acids Research, 2013, 41, 5273-5289.	14.5	51
42	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
43	Application of quantitative immunoprecipitation combined with knockdown and crossâ€linking to <i>Chlamydomonas</i> 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
44	Real-time monitoring of subcellular H2O2 distribution in <i>Chlamydomonas reinhardtii</i>. Plant Cell, 2021, 33, 2935-2949.	6.6	50
45	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
46	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
47	Acclimation in plants â€“ the Green Hub consortium. Plant Journal, 2021, 106, 23-40.	5.7	44
48	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
49	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
50	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
51	Effects of microcompartmentation on flux distribution and metabolic pools in Chlamydomonas reinhardtii chloroplasts. ELife, 2018, 7, .	6.0	37
52	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
53	VIPP1 rods engulf membranes containing phosphatidylinositol phosphates. Scientific Reports, 2019, 9, 8725.	3.3	35
54	Chlorophyll-deficient mutants of Chlamydomonas reinhardtii that accumulate magnesium protoporphyrin IX. Plant Molecular Biology, 2010, 72, 643-658.	3.9	34

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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	PETOÂInteracts with Other Effectors of Cyclic Electron Flow in Chlamydomonas. Molecular Plant, 2016, 9, 558-568.	8.3	34
57	Not changes in membrane fluidity but proteotoxic stress triggers heat shock protein expression in <scp><i>Chlamydomonas reinhardtii</i></scp>. Plant, Cell and Environment, 2017, 40, 2987-3001.	5.7	33
58	Identification of Chloroplast Envelope Proteins with Critical Importance for Cold Acclimation. Plant Physiology, 2020, 182, 1239-1255.	4.8	33
59	Artificial Intelligence Understands Peptide Observability and Assists With Absolute Protein Quantification. Frontiers in Plant Science, 2018, 9, 1559.	3.6	31
60	Chloroplast DnaJ-like proteins 3 and 4 (CDJ3/4) from <i>Chlamydomonas reinhardtii</i> contain redox-active Feâ€“S clusters and interact with stromal HSP70B. Biochemical Journal, 2010, 427, 205-215.	3.7	30
61	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
62	Parkinson mice show functional and molecular changes in the gut long before motoric disease onset. Molecular Neurodegeneration, 2021, 16, 34.	10.8	29
63	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
64	Assistance for a Chaperone. Journal of Biological Chemistry, 2008, 283, 16363-16373.	3.4	27
65	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
66	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
67	VIPP2 interacts with VIPP1 and HSP22E/F at chloroplast membranes and modulates a retrograde signal for <i>HSP22E/F</i> gene expression. Plant, Cell and Environment, 2020, 43, 1212-1229.	5.7	25
68	The <i>Chlamydomonas deg1c</i> Mutant Accumulates Proteins Involved in High Light Acclimation. Plant Physiology, 2019, 181, 1480-1497.	4.8	24
69	Cloning of nodule-specific cDNAs of Galega orientalis. Physiologia Plantarum, 2002, 114, 588-593.	5.2	23
70	The Role of Plastidic Trigger Factor Serving Protein Biogenesis in Green Algae and Land Plants. Plant Physiology, 2019, 179, 1093-1110.	4.8	22
71	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
72	Protocol: methodology for chromatin immunoprecipitation (ChIP) in Chlamydomonas reinhardtii. Plant Methods, 2011, 7, 35.	4.3	21

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73	Chaperones and Proteases. , 2009, , 671-729.		19
74	A â€˜foldosomeâ€™ in the chloroplast?. Plant Signaling and Behavior, 2009, 4, 301-303.	2.4	19
75	InÂ vitro 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
76	TEF30 Interacts with Photosystem II Monomers and Is Involved in the Repair of Photodamaged Photosystem II in <i>Chlamydomonas reinhardtii</i>. Plant Physiology, 2016, 170, 821-840.	4.8	18
77	Complexome profiling on the <i>Chlamydomonas lpa2</i> mutant reveals insights into PSII biogenesis and new PSII associated proteins. Journal of Experimental Botany, 2022, 73, 245-262.	4.8	18
78	Rationales and Approaches for Studying Metabolism in Eukaryotic Microalgae. Metabolites, 2014, 4, 184-217.	2.9	18
79	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
80	Heteroâ€oligomeric CPN60 resembles highly symmetric groupâ€I chaperonin structure revealed by Cryoâ€EM. Plant Journal, 2019, 98, 798-812.	5.7	15
81	A longer isoform of Stim1 is a negative SOCE regulator but increases cAMPâ€modulated NFAT signaling. EMBO Reports, 2022, 23, e53135.	4.5	13
82	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
83	Molecular Advancements Establishing Chlamydomonas as a Host for Biotechnological Exploitation. Frontiers in Plant Science, 0, 13, .	3.6	10
84	New destination vectors facilitate Modular Cloning for Chlamydomonas. Current Genetics, 2022, , 1.	1.7	6
85	The cryo-EM structure of the chloroplast ClpP complex. Nature Plants, 2021, 7, 1505-1515.	9.3	5
86	Phosphoinositides regulate chloroplast processes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9154-9156.	7.1	4
87	<i>In Vivo</i> Structure-Function Analysis and Redox Interactomes of Leishmania tarentolae Erv. Microbiology Spectrum, 2021, 9, e0080921.	3.0	4
88	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
89	The Chloroplastic GrpE Homolog of Chlamydomonas: Two Isoforms Generated by Differential Splicing. Plant Cell, 2001, 13, 2823.	6.6	0
90	Molecular Chaperone Functions in Plastids. , 2014, , 325-357.		0