Mark Aurel SchÃ¶ttler

List of Publications by Year
in descending order

51 papers	2,952 citations	186265 28 h-index	182427 51 g-index
55 all docs	55 docs citations	55 times ranked	3279 citing authors

#	Article	IF	Citations
1	Rpl33, a Nonessential Plastid-Encoded Ribosomal Protein in Tobacco, Is Required under Cold Stress Conditions Â. Plant Cell, 2008, 20, 2221-2237.	6.6	184
2	ATP Synthase Repression in Tobacco Restricts Photosynthetic Electron Transport, CO₂ Assimilation, and Plant Growth by Overacidification of the Thylakoid Lumen. Plant Cell, 2011, 23, 304-321.	6.6	184
3	Peroxiredoxin Q ofArabidopsis thalianais attached to the thylakoids and functions in context of photosynthesisâ€. Plant Journal, 2006, 45, 968-981.	5.7	165
4	Photosynthetic complex stoichiometry dynamics in higher plants: environmental acclimation and photosynthetic flux control. Frontiers in Plant Science, 2014, 5, 188.	3.6	141
5	Nonessential Plastid-Encoded Ribosomal Proteins in Tobacco: A Developmental Role for Plastid Translation and Implications for Reductive Genome Evolution Â. Plant Cell, 2011, 23, 3137-3155.	6.6	130
6	Monogalactosyldiacylglycerol Deficiency in Arabidopsis Affects Pigment Composition in the Prolamellar Body and Impairs Thylakoid Membrane Energization and Photoprotection in Leaves Â. Plant Physiology, 2008, 148, 580-592.	4.8	118
7	The Role of Plastocyanin in the Adjustment of the Photosynthetic Electron Transport to the Carbon Metabolism in Tobacco. Plant Physiology, 2004, 136, 4265-4274.	4.8	116
8	The plastidâ€specific ribosomal proteins of Arabidopsis thaliana can be divided into nonâ€essential proteins and genuine ribosomal proteins. Plant Journal, 2012, 69, 302-316.	5.7	114
9	Control of retrograde signalling by protein import and cytosolic folding stress. Nature Plants, 2019, 5, 525-538.	9.3	109
10	Limitations to photosynthesis by proton motive force-induced photosystem II photodamage. ELife, 2016, 5, .	6.0	101
11	Deficiency in Phylloquinone (Vitamin K1) Methylation Affects Prenyl Quinone Distribution, Photosystem I Abundance, and Anthocyanin Accumulation in the Arabidopsis AtmenG Mutant. Journal of Biological Chemistry, 2006, 281, 40461-40472.	3.4	97
12	Photosystem II Supercomplex Remodeling Serves as an Entry Mechanism for State Transitions in Arabidopsis Â Â. Plant Cell, 2011, 23, 2964-2977.	6.6	88
13	Photosynthetic complex stoichiometry dynamics in higher plants: biogenesis, function, and turnover of ATP synthase and the cytochrome b6f complex. Journal of Experimental Botany, 2015, 66, 2373-2400.	4.8	87
14	Photosystem I: Its biogenesis and function in higher plants. Journal of Plant Physiology, 2011, 168, 1452-1461.	3.5	82
15	The Plastid Genome-Encoded Ycf4 Protein Functions as a Nonessential Assembly Factor for Photosystem I in Higher Plants Â. Plant Physiology, 2012, 159, 579-591.	4.8	79
16	Plastocyanin redox kinetics in spinach chloroplasts: evidence for disequilibrium in the high potential chain. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1659, 63-72.	1.0	72
17	Y3IP1, a Nucleus-Encoded Thylakoid Protein, Cooperates with the Plastid-Encoded Ycf3 Protein in Photosystem I Assembly of Tobacco and Arabidopsis Â Â. Plant Cell, 2010, 22, 2838-2855.	6.6	72
18	Knock-out of the Plastid-encoded PetL Subunit Results in Reduced Stability and Accelerated Leaf Age-dependent Loss of the Cytochrome b6f Complex. Journal of Biological Chemistry, 2007, 282, 976-985.	3.4	66

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19	RAPTOR Controls Developmental Growth Transitions by Altering the Hormonal and Metabolic Balance. Plant Physiology, 2018, 177, 565-593.	4.8	66
20	The pentatricopeptide repeatâ€SMR protein ATP4 promotes translation of the chloroplast atpB/E mRNA. Plant Journal, 2012, 72, 547-558.	5.7	63
21	The plastome-encoded PsaJ subunit is required for efficient Photosystem I excitation, but not for plastocyanin oxidation in tobacco. Biochemical Journal, 2007, 403, 251-260.	3.7	57
22	Highly Resolved Systems Biology to Dissect the Etioplast-to-Chloroplast Transition in Tobacco Leaves. Plant Physiology, 2019, 180, 654-681.	4.8	51
23	LCAA, a Novel Factor Required for Magnesium Protoporphyrin Monomethylester Cyclase Accumulation and Feedback Control of Aminolevulinic Acid Biosynthesis in Tobacco Â Â. Plant Physiology, 2012, 160, 1923-1939.	4.8	50
24	Defects in leaf carbohydrate metabolism compromise acclimation to high light and lead to a high chlorophyll fluorescence phenotype in Arabidopsis thaliana. BMC Plant Biology, 2012, 12, 8.	3.6	43
25	Inducible Repression of Nuclear-Encoded Subunits of the Cytochrome b6f Complex in Tobacco Reveals an Extraordinarily Long Lifetime of the Complex Â Â. Plant Physiology, 2014, 165, 1632-1646.	4.8	41
26	Chloroplast competition is controlled by lipid biosynthesis in evening primroses. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5665-5674.	7.1	39
27	Expression of a carotenogenic gene allows faster biomass production by redesigning plant architecture and improving photosynthetic efficiency in tobacco. Plant Journal, 2020, 103, 1967-1984.	5.7	39
28	Limited Responsiveness of Chloroplast Gene Expression during Acclimation to High Light in Tobacco. Plant Physiology, 2020, 182, 424-435.	4.8	36
29	Reverse genetics in complex multigene operons by coâ€transformation of the plastid genome and its application to the open reading frame previously designated psbN. Plant Journal, 2013, 75, 1062-1074.	5.7	33
30	Elimination of a group II intron from a plastid gene causes a mutant phenotype. Nucleic Acids Research, 2011, 39, 5181-5192.	14.5	32
31	H⁺ Transport by K⁺ EXCHANGE ANTIPORTER3 Promotes Photosynthesis and Growth in Chloroplast ATP Synthase Mutants. Plant Physiology, 2020, 182, 2126-2142.	4.8	32
32	Generation and characterization of a collection of knock-down lines for the chloroplast Clp protease complex in tobacco. Journal of Experimental Botany, 2017, 68, 2199-2218.	4.8	31
33	The plastid-encoded PsaI subunit stabilizes photosystem I during leaf senescence in tobacco. Journal of Experimental Botany, 2017, 68, 1137-1155.	4.8	31
34	Heterologous expression of AtPAP2 in transgenic potato influences carbon metabolism and tuber development. FEBS Letters, 2014, 588, 3726-3731.	2.8	29
35	The Thylakoid Membrane Protein CGL160 Supports CF1CF0 ATP Synthase Accumulation in Arabidopsis thaliana. PLoS ONE, 2015, 10, e0121658.	2.5	29
36	The Combined Loss of Triose Phosphate and Xylulose 5-Phosphate/Phosphate Translocators Leads to Severe Growth Retardation and Impaired Photosynthesis in Arabidopsis thaliana tpt/xpt Double Mutants. Frontiers in Plant Science, 2018, 9, 1331.	3.6	27

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37	Chloroplast translational regulation uncovers nonessential photosynthesis genes as key players in plant cold acclimation. Plant Cell, 2022, 34, 2056-2079.	6.6	25
38	Targeted introduction of heritable point mutations into the plant mitochondrial genome. Nature Plants, 2022, 8, 245-256.	9.3	25
39	Chlorosis caused by two recessively interacting genes reveals a role of <scp>RNA</scp> helicase in hybrid breakdown in Arabidopsis thaliana. Plant Journal, 2017, 91, 251-262.	5.7	24
40	The paramutated SULFUREA locus of tomato is involved in auxin biosynthesis. Journal of Experimental Botany, 2008, 59, 3635-3647.	4.8	23
41	Identification and characterization of a stable intermediate in photosystem I assembly in tobacco. Plant Journal, 2017, 90, 478-490.	5.7	21
42	A photosynthesis operon in the chloroplast genome drives speciation in evening primroses. Plant Cell, 2021, 33, 2583-2601.	6.6	21
43	Stromal NADH supplied by PHOSPHOGLYCERATE DEHYDROGENASE3 is crucial for photosynthetic performance. Plant Physiology, 2021, 186, 142-167.	4.8	16
44	Establishment of a Heterologous RNA Editing Event in Chloroplasts. Plant Physiology, 2019, 181, 891-900.	4.8	13
45	Functional characterization of proton antiport regulation in the thylakoid membrane. Plant Physiology, 2021, 187, 2209-2229.	4.8	11
46	AtRsgA from Arabidopsis thaliana is important for maturation of the small subunit of the chloroplast ribosome. Plant Journal, 2018, 96, 404-420.	5.7	9
47	Performance of Arabidopsis thaliana under different light qualities: comparison of light-emitting diodes to fluorescent lamp. Functional Plant Biology, 2017, 44, 727.	2.1	6
48	Correction of frameshift mutations in the atpB gene by translational recoding in chloroplasts of Oenothera and tobacco. Plant Cell, 2021, 33, 1682-1705.	6.6	6
49	The availability of neither D2 nor CP43 limits the biogenesis of photosystem II in tobacco. Plant Physiology, 2021, 185, 1111-1130.	4.8	6
50	Sulfite Reductase Co-suppression in Tobacco Reveals Detoxification Mechanisms and Downstream Responses Comparable to Sulfate Starvation. Frontiers in Plant Science, 2018, 9, 1423.	3.6	5
51	Extranuclear Inheritance: Plastidâ€"Nuclear Cooperation in Photosystem I Assembly in Photosynthetic Eukaryotes. Progress in Botany Fortschritte Der Botanik, 2008, , 89-115.	0.3	5