Udo Gowik

List of Publications by Year
in descending order

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40 papers	5,743 citations	201385 27 h-index	276539 41 g-index
46 all docs	46 docs citations	46 times ranked	6847 citing authors

#	Article	IF	Citations
1	The Sorghum bicolor genome and the diversification of grasses. Nature, 2009, 457, 551-556.	13.7	2,642
2	The Path from C3 to C4 Photosynthesis. Plant Physiology, 2011, 155, 56-63.	2.3	227
3	cis-Regulatory Elements for Mesophyll-Specific Gene Expression in the C4 Plant Flaveria trinervia, the Promoter of the C4 Phosphoenolpyruvate Carboxylase Gene[W]. Plant Cell, 2004, 16, 1077-1090.	3.1	222
4	An mRNA Blueprint for C4 Photosynthesis Derived from Comparative Transcriptomics of Closely Related C3 and C4 Species Â Â. Plant Physiology, 2011, 155, 142-156.	2.3	222
5	A plastidial sodium-dependent pyruvate transporter. Nature, 2011, 476, 472-475.	13.7	215
6	Evolution of C4 Photosynthesis in the GenusFlaveria: How Many and Which Genes Does It Take to Make C4?. Plant Cell, 2011, 23, 2087-2105.	3.1	185
7	The role of photorespiration during the evolution of C4 photosynthesis in the genus Flaveria. ELife, 2014, 3, e02478.	2.8	182
8	Predicting C4 Photosynthesis Evolution: Modular, Individually Adaptive Steps on a Mount Fuji Fitness Landscape. Cell, 2013, 153, 1579-1588.	13.5	173
9	Comparative genomic analysis of C4 photosynthetic pathway evolution in grasses. Genome Biology, 2009, 10, R68.	13.9	144
10	What can next generation sequencing do for you? Next generation sequencing as a valuable tool in plant research. Plant Biology, 2010, 12, 831-841.	1.8	140
11	RNA-Seq Assembly â€“ Are We There Yet?. Frontiers in Plant Science, 2012, 3, 220.	1.7	112
12	Photorespiration connects C₃and C₄photosynthesis. Journal of Experimental Botany, 2016, 67, 2953-2962.	2.4	104
13	Evolution of GOLDEN2-LIKE gene function in C3 and C4 plants. Planta, 2013, 237, 481-495.	1.6	98
14	Evolution of C4 Phosphoenolpyruvate Carboxylase. Genes and Proteins: a Case Study with the Genus Flaveria. Annals of Botany, 2004, 93, 13-23.	1.4	97
15	Evolution of C4 Photosynthesis in the Genus Flaveria: Establishment of a Photorespiratory CO2 Pump. Plant Cell, 2013, 25, 2522-2535.	3.1	84
16	On the Evolutionary Origin of CAM Photosynthesis. Plant Physiology, 2017, 174, 473-477.	2.3	84
17	Evolution and Function of acis-Regulatory Module for Mesophyll-Specific Gene Expression in the C4 DicotFlaveria trinervia. Plant Cell, 2007, 19, 3391-3402.	3.1	76
18	Molecular evolution of C4 phosphoenolpyruvate carboxylase in the genus Flaveria?a gradual increase from C3 to C4 characteristics. Planta, 2003, 217, 717-725.	1.6	60

#	Article	IF	Citations
19	Photosynthesis in C₃â€“C₄intermediateMoricandiaspecies. Journal of Experimental Botany, 2017, 68, 191-206.	2.4	58
20	The Gene for the P-Subunit of Glycine Decarboxylase from the C4 SpeciesFlaveria trinervia: Analysis of Transcriptional Control in TransgenicFlaveria bidentis(C4) and Arabidopsis (C3) Â Â. Plant Physiology, 2008, 146, 1773-1785.	2.3	47
21	Most photorespiratory genes are preferentially expressed in the bundle sheath cells of the C₄grassSorghum bicolor. Journal of Experimental Botany, 2016, 67, 3053-3064.	2.4	47
22	RNA-Seq based phylogeny recapitulates previous phylogeny of the genus Flaveria (Asteraceae) with some modifications. BMC Evolutionary Biology, 2015, 15, 116.	3.2	46
23	Glycine decarboxylase in C3, C4 and C3â€“C4 intermediate species. Current Opinion in Plant Biology, 2016, 31, 29-35.	3.5	44
24	Evolution of C4 Photosynthesisâ€”Looking for the Master Switch. Plant Physiology, 2010, 154, 598-601.	2.3	43
25	Evolution of C4 phosphoenolpyruvate carboxylase in the genus Alternanthera: gene families and the enzymatic characteristics of the C4 isozyme and its orthologues in C3 and C3/C4 Alternantheras. Planta, 2006, 223, 359-368.	1.6	40
26	Regulation of the Photorespiratory GLDPA Gene in C4 ÂFlaveria: An Intricate Interplay of Transcriptional and Posttranscriptional Processes. Plant Cell, 2012, 24, 137-151.	3.1	40
27	Metabolic Labeling of RNAs Uncovers Hidden Features and Dynamics of the Arabidopsis Transcriptome. Plant Cell, 2020, 32, 871-887.	3.1	38
28	Efficient 2-phosphoglycolate degradation is required to maintain carbon assimilation and allocation in the C4 plantFlaveria bidentis. Journal of Experimental Botany, 2019, 70, 575-587.	2.4	33
29	Evolution of C4phosphoenolpyruvate carboxylase in Flaveria: determinants for high tolerance towards the inhibitor L-malate. Plant, Cell and Environment, 2008, 31, 793-803.	2.8	29
30	C₃cotyledons are followed by C₄leaves: intra-individual transcriptome analysis ofSalsola soda(Chenopodiaceae). Journal of Experimental Botany, 2017, 68, 161-176.	2.4	29
31	Agrobacterium tumefaciens-mediated transformation of Cleome gynandra L., a C4 dicotyledon that is closely related to Arabidopsis thaliana. Journal of Experimental Botany, 2010, 61, 1311-1319.	2.4	28
32	A MEM1-like motif directs mesophyll cell-specific expression of the gene encoding the C₄carbonic anhydrase inFlaveria. Journal of Experimental Botany, 2017, 68, 311-320.	2.4	24
33	Evolution of the Phosphoenolpyruvate Carboxylase Protein Kinase Family in C3 and C4 ÂFlaveria spp. Â Â. Plant Physiology, 2014, 165, 1076-1091.	2.3	23
34	The C₄Ppc promoters of many C₄ grass species share a common regulatory mechanism for gene expression in the mesophyll cell. Plant Journal, 2020, 101, 204-216.	2.8	21
35	De novo Transcriptome Assembly and Comparison of C3, C3-C4, and C4 Species of Tribe Salsoleae (Chenopodiaceae). Frontiers in Plant Science, 2017, 8, 1939.	1.7	19
36	Expression of SULTR2;2, encoding a low-affinity sulphur transporter, in the Arabidopsis bundle sheath and vein cells is mediated by a positive regulator. Journal of Experimental Botany, 2018, 69, 4897-4906.	2.4	17

#	Article	IF	Citations
37	Dynamic changes of genome sizes and gradual gain of cellâ€specific distribution of C₄ enzymes during C₄ evolution in genus Flaveria. Plant Genome, 2021, 14, e20095.	1.6	14
38	The coordination of major events in C4 photosynthesis evolution in the genus Flaveria. Scientific Reports, 2021, 11, 15618.	1.6	12
39	Reporterâ€based forward genetic screen to identify bundle sheath anatomy mutants in A.Âthaliana. Plant Journal, 2019, 97, 984-995.	2.8	8
40	Chapter 13 C4-Phosphoenolpyruvate Carboxylase. Advances in Photosynthesis and Respiration, 2010, , 257-275.	1.0	5