Peter Westhoff

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4607944/publications.pdf

Version: 2024-02-01

108 papers	9,507 citations	50244 46 h-index	39638 94 g-index
110 all docs	110 docs citations	110 times ranked	8340 citing authors

#	Article	IF	Citations
1	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
2	The coordination of major events in C4 photosynthesis evolution in the genus Flaveria. Scientific Reports, 2021, 11, 15618.	1.6	12
3	Meadow hay, Sida hermaphrodita (L.) Rusby and Silphium perfoliatum L. as potential non-wood raw materials for the pulp and paper industry. Industrial Crops and Products, 2021, 167, 113548.	2.5	17
4	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
5	Targeted misexpression of NAC052, acting in H3K4 demethylation, alters leaf morphological and anatomical traits in Arabidopsis thaliana. Journal of Experimental Botany, 2020, 71, 1434-1448.	2.4	4
6	Towards high-biomass yielding bioenergy crop Silphium perfoliatum L.: phenotypic and genotypic evaluation of five cultivated populations. Biomass and Bioenergy, 2019, 124, 102-113.	2.9	25
7	Reporterâ€based forward genetic screen to identify bundle sheath anatomy mutants in A.Âthaliana. Plant Journal, 2019, 97, 984-995.	2.8	8
8	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
9	SHORTROOT-Mediated Increase in Stomatal Density Has No Impact on Photosynthetic Efficiency. Plant Physiology, 2018, 176, 757-772.	2.3	56
10	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
11	The DnaJ-Like Zinc-Finger Protein HCF222 Is Required for Thylakoid Membrane Biogenesis in Plants. Plant Physiology, 2017, 174, 1807-1824.	2.3	16
12	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
13	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
14	C₃cotyledons are followed by C₄leaves: intra-individual transcriptome analysis ofSalsola soda(Chenopodiaceae). Journal of Experimental Botany, 2017, 68, 161-176.	2.4	29
15	Glycine decarboxylase in C3, C4 and C3â€“C4 intermediate species. Current Opinion in Plant Biology, 2016, 31, 29-35.	3.5	44
16	QTL mapping of seedling root traits associated with nitrogen and water use efficiency in maize. Euphytica, 2016, 209, 585-602.	0.6	28
17	RNA-Seq based phylogeny recapitulates previous phylogeny of the genus Flaveria (Asteraceae) with some modifications. BMC Evolutionary Biology, 2015, 15, 116.	3.2	46
18	The role of photorespiration during the evolution of C4 photosynthesis in the genus Flaveria. ELife, 2014, 3, e02478.	2.8	182

#	Article	IF	Citations
19	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
20	Expression of a nuclearâ€encoded psbH gene complements the plastidic <scp>RNA</scp> processing defect in the <scp>PSII</scp> mutant hcf107 in Arabidopsis thaliana. Plant Journal, 2014, 80, 292-304.	2.8	20
21	Stable Carbon Isotope Discrimination Is under Genetic Control in the C4 Species Maize with Several Genomic Regions Influencing Trait Expression Â. Plant Physiology, 2014, 164, 131-143.	2.3	34
22	Evolution of GOLDEN2-LIKE gene function in C3 and C4 plants. Planta, 2013, 237, 481-495.	1.6	98
23	pAUL: A Gateway-Based Vector System for Adaptive Expression and Flexible Tagging of Proteins in Arabidopsis. PLoS ONE, 2013, 8, e53787.	1.1	23
24	Predicting C4 Photosynthesis Evolution: Modular, Individually Adaptive Steps on a Mount Fuji Fitness Landscape. Cell, 2013, 153, 1579-1588.	13.5	173
25	How to build functional thylakoid membranes: from plastid transcription to protein complex assembly. Planta, 2013, 237, 413-428.	1.6	41
26	Evolution of C4 Photosynthesis in the Genus Flaveria: Establishment of a Photorespiratory CO2 Pump. Plant Cell, 2013, 25, 2522-2535.	3.1	84
27	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
28	The Atypical Short-Chain Dehydrogenases HCF173 and HCF244 Are Jointly Involved in Translational Initiation of the psbA mRNA of Arabidopsis Â. Plant Physiology, 2012, 160, 2202-2218.	2.3	59
29	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
30	A plastidial sodium-dependent pyruvate transporter. Nature, 2011, 476, 472-475.	13.7	215
31	Proteomics reveals potential biomarkers of seed vigor in sugarbeet. Proteomics, 2011, 11, 1569-1580.	1.3	89
32	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
33	The Path from C3 to C4 Photosynthesis. Plant Physiology, 2011, 155, 56-63.	2.3	227
34	Recruitment of a Ribosomal Release Factor for Light- and Stress-Dependent Regulation of petB Transcript Stability in Arabidopsis Chloroplasts. Plant Cell, 2011, 23, 2680-2695.	3.1	47
35	Evolution of C4 Photosynthesisâ€”Looking for the Master Switch. Plant Physiology, 2010, 154, 598-601.	2.3	43
36	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

#	Article	IF	Citations
37	The Sorghum bicolor genome and the diversification of grasses. Nature, 2009, 457, 551-556.	13.7	2,642
38	Comparative genomic analysis of C4 photosynthetic pathway evolution in grasses. Genome Biology, 2009, 10, R68.	13.9	144
39	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
40	Evolution of the C4 phosphoenolpyruvate carboxylase promoter of the C4 species Flaveria trinervia: the role of the proximal promoter region. BMC Plant Biology, 2008, 8, 4.	1.6	15
41	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
42	HCF208, a Homolog of Chlamydomonas CCB2, is Required for Accumulation of Native Cytochrome b6 in Arabidopsis thaliana. Plant and Cell Physiology, 2007, 48, 1737-1746.	1.5	23
43	The Nuclear-Encoded Factor HCF173 Is Involved in the Initiation of Translation of the psbA mRNA in Arabidopsis thaliana. Plant Cell, 2007, 19, 1329-1346.	3.1	95
44	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
45	Vipp1 is required for basic thylakoid membrane formation but not for the assembly of thylakoid protein complexes. Plant Physiology and Biochemistry, 2007, 45, 119-128.	2.8	73
46	Quantitative trait loci for early plant vigour of maize grown in chilly environments. Theoretical and Applied Genetics, 2007, 114, 1059-1070.	1.8	70
47	HCF153, a novel nuclear-encoded factor necessary during a post-translational step in biogenesis of the cytochromeb6fcomplex. Plant Journal, 2006, 45, 101-112.	2.8	23
48	The nuclear gene HCF107 encodes a membrane-associated R-TPR (RNA tetratricopeptide) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (Journal, 2005, 42, 720-730.	2.8	68
49	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
50	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
51	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
52	TheArabidopsismutantdctis deficient in the plastidic glutamate/malate translocator DiT2. Plant Journal, 2003, 35, 316-331.	2.8	152
53	RNA-binding properties of HCF152, an Arabidopsis PPR protein involved in the processing of chloroplast RNA. FEBS Journal, 2003, 270, 4070-4081.	0.2	109
54	Evolution of C4 phosphoenolpyruvate carboxylase. Archives of Biochemistry and Biophysics, 2003, 414, 180-188.	1.4	98

#	Article	IF	Citations
55	Serine 774 and amino acids 296 to 437 comprise the major C4 determinants of the C4 phosphoenolpyruvate carboxylase ofFlaveria trinervia. FEBS Letters, 2002, 524, 11-14.	1.3	33
56	The HCF136 protein is essential for assembly of the photosystem II reaction center inArabidopsis thaliana. FEBS Letters, 2002, 532, 85-90.	1.3	133
57	The non-photosynthetic phosphoenolpyruvate carboxylases of the C4 dicot Flaveria trinervia - implications for the evolution of C4 photosynthesis. Planta, 2002, 215, 448-456.	1.6	47
58	HCF164 Encodes a Thioredoxin-Like Protein Involved in the Biogenesis of the Cytochrome b 6 f Complex in Arabidopsis. Plant Cell, 2001, 13, 2539.	3.1	2
59	The Nucleus-Encoded HCF107 Gene of Arabidopsis Provides a Link between Intercistronic RNA Processing and the Accumulation of Translation-Competent psbH Transcripts in Chloroplasts. Plant Cell, 2001, 13, 2127-2141.	3.1	95
60	HCF164 Encodes a Thioredoxin-Like Protein Involved in the Biogenesis of the Cytochrome b₆f Complex in Arabidopsis. Plant Cell, 2001, 13, 2539-2551.	3.1	154
61	The Nucleus-Encoded HCF107 Gene of Arabidopsis Provides a Link between Intercistronic RNA Processing and the Accumulation of Translation-Competent psbH Transcripts in Chloroplasts. Plant Cell, 2001, 13, 2127.	3.1	0
62	Thylakoid Biogenesis and Dynamics: The Result of a Complex Phylogenetic Puzzle. , 2001, , 1-28.		6
63	Evolution of C4 Phosphoenolpyruvate Carboxylase inFlaveria, a Conserved Serine Residue in the Carboxyl-terminal Part of the Enzyme Is a Major Determinant for C4-specific Characteristics. Journal of Biological Chemistry, 2000, 275, 27917-27923.	1.6	110
64	Different lumen-targeting pathways for nuclear-encoded versus cyanobacterial/plastid-encoded Hcf136 proteins. FEBS Letters, 2000, 467, 97-100.	1.3	12
65	A Plastid Sigma Factor Sequence from the C₄ Monocot Sorghum bicolor. Plant Biology, 1999, 1, 180-186.	1.8	7
66	The molecular basis of C4 photosynthesis in sorghum: isolation, characterization and RFLP mapping of mesophyll- and bundle-sheath-specific cDNAs obtained by differential screening. Plant Molecular Biology, 1998, 37, 319-335.	2.0	46
67	A nuclear-encoded protein of prokaryotic origin is essential for the stability of photosystem II in Arabidopsis thaliana. EMBO Journal, 1998, 17, 5286-5297.	3.5	215
68	Analysis of Promoter Activity for the Gene Encoding Pyruvate Orthophosphate Dikinase in Stably Transformed C4Flaveria Species1. Plant Physiology, 1998, 117, 821-829.	2.3	26
69	QTL Mapping in Testcrosses of Flint Lines of Maize: III. Comparison across Populations for Forage Traits. Crop Science, 1998, 38, 1278-1289.	0.8	76
70	Fluorescence Kinetics of Whole Plants of Arabidopsis Thaliana. , 1998, , 2147-2150.		0
71	The Promoter of the Gene Encoding the C 4 Form of Phosphoenolpyruvate Carboxylase Directs Mesophyll-Specific Expression in Transgenic C 4 Flaveria spp. Plant Cell, 1997, 9, 479.	3.1	37
72	Evolution of the Enzymatic Characteristics of C4Phosphoenol Pyruvate Carboxylase. A Comparison of the Orthologous Ppca Phosphoenol Pyruvate Carboxylases of Flaveria Trinervia (C4) and Flaveria Pringlei (C3). FEBS Journal, 1997, 246, 452-460.	0.2	45

#	Article	IF	Citations
73	The phosphoenolpyruvate carboxylase (ppc) gene family of Flaveria trinervia (C4) and F. pringlei (C3): molecular characterization and expression analysis of the ppcB and ppcC genes. , 1997, 34, 427-443.		31
74	Molecular Evolution of C4 Phosphoenolpyruvate Carboxylase in the Genus Flaveria. Functional Plant Biology, 1997, 24, 429.	1.1	10
75	Isolation of high-chlorophyll-fluorescence mutants ofArabidopsis thaliana and their characterisation by spectroscopy, immunoblotting and Northern hybridisation. Planta, 1996, 198, 385-396.	1.6	197
76	Molecular characterization of transketolase (EC 2.2.1.1) active in the Calvin cycle of spinach chloroplasts. Plant Molecular Biology, 1996, 32, 475-484.	2.0	41
77	Differential expression of plastome-encoded ndh genes in mesophyll and bundle-sheath chloroplasts of the C4 plant Sorghum bicolor indicates that the complex I-homologous NAD(P)H-plastoquinone oxidoreductase is involved in cyclic electron transport. Planta, 1996, 199, 276.	1.6	90
78	A Nuclear Mutant of Arabidopsis with Impaired Stability on Distinct Transcripts of the Plastid psbB, psbD/C, ndhH, and ndhC Operons. Plant Cell, 1996, 8, 1193.	3.1	14
79	Cloning of the amphibolic Calvin cycle/OPPP enzyme d-ribulose-5-phosphate 3-epimerase (EC 5.1.3.1) from spinach chloroplasts: functional and evolutionary aspects. Plant Molecular Biology, 1995, 29, 1279-1291.	2.0	31
80	Genomic structure and expression of the pyruvate, orthophosphate dikinase gene of the dicotyledonous C4 plant Flaveria trinervia (Asteraceae). Plant Molecular Biology, 1995, 29, 663-678.	2.0	53
81	Evolution of the C4 phosphoenolpyruvate carboxylase promoter of the C4 dicot Flaveria trinervia: an expression analysis in the C3 plant tobacco. Molecular Genetics and Genomics, 1994, 245, 286-293.	2.4	33
82	Primary structure of the photosynthetic pyruvate orthophosphate dikinase of the C3 plant Flaveria pringlei and expression analysis of pyruvate orthophosphate dikinase sequences in C3, C3?C4 and C4 Flaveria species. Plant Molecular Biology, 1994, 26, 763-769.	2.0	39
83	The C3 plant Flaveria pringlei contains a plastidic NADP-malic enzyme which is orthologous to the C4 isoform of the C4 plant F. trinervia. Plant Molecular Biology, 1994, 26, 1775-1783.	2.0	28
84	Differential transcription of plastome-encoded genes in the mesophyll and bundle-sheath chloroplasts of the monocotyledonous NADP-malic enzyme-type C4 plants maize and Sorghum. Plant Molecular Biology, 1994, 25, 669-679.	2.0	47
85	Studies on the expression of NDH-H, a subunit of the NAD(P)H-plastoquinone-oxidoreductase of higher-plant chloroplasts. Planta, 1993, 190, 25.	1.6	81
86	Differential biogenesis of photosystem II in mesophyll and bundle-sheath cells of monocotyledonous NADP-malic enzyme-type C4 plants: the non-stoichiometric abundance of the subunits of photosystem II in the bundle-sheath chloroplasts and the translational activity of the plastome-encoded genes. Planta, 1993, 191, 23.	1.6	74
87	Subunit III (Psa-F) of photosystem I reaction center of the C4 dicotyledon Flaveria trinervia. Plant Molecular Biology, 1993, 21, 573-577.	2.0	7
88	Homologous genes for the C4 isoform of phosphoenolpyruvate carboxylase in a C3 and a C4 Flaveria species. Molecular Genetics and Genomics, 1992, 234, 275-284.	2.4	60
89	Differential accumulation of the 10-, 16- and 23-kDa peripheral components of the water-splitting complex of photosystem II in mesophyll and bundle-sheath chloroplasts of the dicotyledonous C4 plant Flaveria trinervia (Spreng.) C. Mohr. Planta, 1992, 186, 304-12.	1.6	44
90	Differential accumulation of plastid transcripts encoding photosystem II components in the mesophyll and bundle-sheath cells of monocotyledonous NADP-malic enzyme-type C4 plants. Planta, 1991, 184, 377-88.	1.6	52

#	Article	IF	Citations
91	Transcriptional control of plastid gene expression in greening Sorghum seedlings. Planta, 1991, 183, 101-11.	1.6	34
92	Differential biogenesis of photosystem-II in mesophyll and bundle-sheath cells of 'malic' enzyme NADP+-type C4 plants. A comparative protein and RNA analysis. FEBS Journal, 1990, 190, 185-194.	0.2	47
93	Analysis of expression and evolutionary relationships of phosphoenol-pyruvate carboxylase genes in Flaveria trinervia (C4) and F. pringlei (C3). Molecular Genetics and Genomics, 1990, 224, 459-68.	2.4	49
94	Primary structure of NADP-dependent malic enzyme in the dicotyledonous C4plantFlaveria trinervia. FEBS Letters, 1990, 273, 111-115.	1.3	55
95	Primary structure of pyruvate, orthophosphate dikinase in the dicotyledonous C4plantFlaveria trinervia. FEBS Letters, 1990, 273, 116-121.	1.3	34
96	Light Quality and Irradiance Level Interaction in the Control of Expression of Light-Harvesting Complex of Photosystem II. Plant Physiology, 1989, 91, 163-169.	2.3	23
97	Complex RNA maturation in chloroplasts. The psbB operon from spinach. FEBS Journal, 1988, 171, 551-564.	0.2	225
98	Transcription of the gene encoding the 51 kd chlorophyll a-apoprotein of the photosystem II reaction centre from spinach. Molecular Genetics and Genomics, 1985, 201, 115-123.	2.4	46
99	Genes and transcripts for the ATP synthase CF0 subunits I and II from spinach thylakoid membranes. Molecular Genetics and Genomics, 1985, 199, 290-299.	2.4	89
100	Localization of the gene for apocytochromeb-559 on the plastid chromosome of spinach. Plant Molecular Biology, 1985, 4, 103-110.	2.0	47
101	Intracellular coding sites of polypeptides associated with photosynthetic oxygen evolution of photosystem II. Plant Molecular Biology, 1985, 4, 137-146.	2.0	68
102	Nucleotide sequence of the clustered genes for the 44 kd chlorophyll a apoprotein and the ?32 kd?-like protein of the photosystem II reaction center in the spinach plastid chromosome. Current Genetics, 1984, 8, 597-606.	0.8	243
103	Genes and transcripts for the P700 chlorophylla apoprotein and subunit 2 of the photosystem I reaction center complex from spinach thylakoid membranes. Plant Molecular Biology, 1983, 2, 95-107.	2.0	106
104	[27] Hybrid selection of specific rnas using DNA covalently coupled to macroporous supports. Methods in Enzymology, 1983, 100, 400-407.	0.4	13
105	Immobilization of denatured DNA to macroporous supports: I. Efficiency of different coupling procedures. Nucleic Acids Research, 1982, 10, 7163-7180.	6.5	72
106	Properties of total and poly(A)+ RNA from exponentially growing and from resting cultures of Tetrahymena thermophila. Experimental Cell Research, 1981, 134, 417-423.	1.2	12
107	Regulation of the Synthesis of Ribulose-1,5-Bisphosphate Carboxylase and Its Subunits in the Flagellate Chlorogonium elongatum. I. The Effect of Light and Acetate on the Synthesis and the Degradation of the Enzyme. FEBS Journal, 1981, 113, 581-586.	0.2	27
108	Regulation of the Synthesis of Ribulose-1,5-Bisphosphate Carboxylase and Its Subunits in the Flagellate Chlorogonium elongatum. Different Levels of Translatable Messenger RNAs for the Large and the Small Subunits in Autotrophic and Heterotrophic Cells as Determined by Immunological Techniques. FEBS Journal, 1981, 116, 261-267.	0.2	45