Peter Westhoff

List of Publications by Year in descending order

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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	The Sorghum bicolor genome and the diversification of grasses. Nature, 2009, 457, 551-556.	13.7	2,642
2	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
3	The Path from C3 to C4 Photosynthesis. Plant Physiology, 2011, 155, 56-63.	2.3	227
4	Complex RNA maturation in chloroplasts. The psbB operon from spinach. FEBS Journal, 1988, 171, 551-564.	0.2	225
5	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
6	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
7	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
8	A plastidial sodium-dependent pyruvate transporter. Nature, 2011, 476, 472-475.	13.7	215
9	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
10	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
11	The role of photorespiration during the evolution of C4 photosynthesis in the genus Flaveria. ELife, 2014, 3, e02478.	2.8	182
12	Predicting C4 Photosynthesis Evolution: Modular, Individually Adaptive Steps on a Mount Fuji Fitness Landscape. Cell, 2013, 153, 1579-1588.	13.5	173
13	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
14	TheArabidopsismutantdctis deficient in the plastidic glutamate/malate translocator DiT2. Plant Journal, 2003, 35, 316-331.	2.8	152
15	Comparative genomic analysis of C4 photosynthetic pathway evolution in grasses. Genome Biology, 2009, 10, R68.	13.9	144
16	The HCF136 protein is essential for assembly of the photosystem II reaction center inArabidopsis thaliana. FEBS Letters, 2002, 532, 85-90.	1.3	133
17	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
18	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

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19	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
20	Evolution of C4 phosphoenolpyruvate carboxylase. Archives of Biochemistry and Biophysics, 2003, 414, 180-188.	1.4	98
21	Evolution of GOLDEN2-LIKE gene function in C3 and C4 plants. Planta, 2013, 237, 481-495.	1.6	98
22	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
23	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
24	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
25	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
26	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
27	Proteomics reveals potential biomarkers of seed vigor in sugarbeet. Proteomics, 2011, 11, 1569-1580.	1.3	89
28	Evolution of C4 Photosynthesis in the Genus Flaveria: Establishment of a Photorespiratory CO2 Pump. Plant Cell, 2013, 25, 2522-2535.	3.1	84
29	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
30	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
31	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
32	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
33	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
34	Immobilization of denatured DNA to macroporous supports: I. Efficiency of different coupling procedures. Nucleic Acids Research, 1982, 10, 7163-7180.	6.5	72
35	Quantitative trait loci for early plant vigour of maize grown in chilly environments. Theoretical and Applied Genetics, 2007, 114, 1059-1070.	1.8	70
36	Intracellular coding sites of polypeptides associated with photosynthetic oxygen evolution of photosystem II. Plant Molecular Biology, 1985, 4, 137-146.	2.0	68

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37	The nuclear gene HCF107 encodes a membrane-associated R-TPR (RNA tetratricopeptide) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Journal, 2005, 42, 720-730.	2.8	68
38	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
39	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
40	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
41	SHORTROOT-Mediated Increase in Stomatal Density Has No Impact on Photosynthetic Efficiency. Plant Physiology, 2018, 176, 757-772.	2.3	56
42	Primary structure of NADP-dependent malic enzyme in the dicotyledonous C4plantFlaveria trinervia. FEBS Letters, 1990, 273, 111-115.	1.3	55
43	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
44	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
45	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
46	Localization of the gene for apocytochromeb-559 on the plastid chromosome of spinach. Plant Molecular Biology, 1985, 4, 103-110.	2.0	47
47	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
48	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
49	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
50	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
51	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
52	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
53	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
54	RNA-Seq based phylogeny recapitulates previous phylogeny of the genus Flaveria (Asteraceae) with some modifications. BMC Evolutionary Biology, 2015, 15, 116.	3.2	46

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55	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
56	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
57	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
58	Glycine decarboxylase in C3, C4 and C3â€“C4 intermediate species. Current Opinion in Plant Biology, 2016, 31, 29-35.	3.5	44
59	Evolution of C4 Photosynthesisâ€”Looking for the Master Switch. Plant Physiology, 2010, 154, 598-601.	2.3	43
60	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
61	How to build functional thylakoid membranes: from plastid transcription to protein complex assembly. Planta, 2013, 237, 413-428.	1.6	41
62	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
63	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
64	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
65	Primary structure of pyruvate, orthophosphate dikinase in the dicotyledonous C4plantFlaveria trinervia. FEBS Letters, 1990, 273, 116-121.	1.3	34
66	Transcriptional control of plastid gene expression in greening Sorghum seedlings. Planta, 1991, 183, 101-11.	1.6	34
67	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
68	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
69	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
70	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
71	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
72	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

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73	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
74	C₃cotyledons are followed by C₄leaves: intra-individual transcriptome analysis ofSalsola soda(Chenopodiaceae). Journal of Experimental Botany, 2017, 68, 161-176.	2.4	29
75	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
76	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
77	QTL mapping of seedling root traits associated with nitrogen and water use efficiency in maize. Euphytica, 2016, 209, 585-602.	0.6	28
78	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
79	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
80	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
81	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
82	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
83	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
84	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
85	pAUL: A Gateway-Based Vector System for Adaptive Expression and Flexible Tagging of Proteins in Arabidopsis. PLoS ONE, 2013, 8, e53787.	1.1	23
86	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
87	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
88	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
89	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
90	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

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91	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
92	The DnaJ-Like Zinc-Finger Protein HCF222 Is Required for Thylakoid Membrane Biogenesis in Plants. Plant Physiology, 2017, 174, 1807-1824.	2.3	16
93	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
94	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
95	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
96	[27] Hybrid selection of specific rnas using DNA covalently coupled to macroporous supports. Methods in Enzymology, 1983, 100, 400-407.	0.4	13
97	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
98	Different lumen-targeting pathways for nuclear-encoded versus cyanobacterial/plastid-encoded Hcf136 proteins. FEBS Letters, 2000, 467, 97-100.	1.3	12
99	The coordination of major events in C4 photosynthesis evolution in the genus Flaveria. Scientific Reports, 2021, 11, 15618.	1.6	12
100	Molecular Evolution of C4 Phosphoenolpyruvate Carboxylase in the Genus Flaveria. Functional Plant Biology, 1997, 24, 429.	1.1	10
101	Reporterâ€based forward genetic screen to identify bundle sheath anatomy mutants in A.Âthaliana. Plant Journal, 2019, 97, 984-995.	2.8	8
102	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
103	A Plastid Sigma Factor Sequence from the C₄ Monocot Sorghum bicolor. Plant Biology, 1999, 1, 180-186.	1.8	7
104	Thylakoid Biogenesis and Dynamics: The Result of a Complex Phylogenetic Puzzle. , 2001, , 1-28.		6
105	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
106	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
107	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
108	Fluorescence Kinetics of Whole Plants of Arabidopsis Thaliana. , 1998, , 2147-2150.		0