Alan M Myers

List of Publications by Year
in descending order

79 papers	13,604 citations	61984 43 h-index	74163 75 g-index
82 all docs	82 docs citations	82 times ranked	10168 citing authors

#	Article	IF	Citations
1	The B73 Maize Genome: Complexity, Diversity, and Dynamics. Science, 2009, 326, 1112-1115.	12.6	3,612
2	Yeast/E. coli shuttle vectors with multiple unique restriction sites. Yeast, 1986, 2, 163-167.	1.7	1,471
3	Yeast shuttle and integrative vectors with multiple cloning sites suitable for construction of lacZ fusions. Gene, 1986, 45, 299-310.	2.2	658
4	Recent Progress toward Understanding Biosynthesis of the Amylopectin Crystal. Plant Physiology, 2000, 122, 989-998.	4.8	472
5	Starch synthesis in the cereal endosperm. Current Opinion in Plant Biology, 2003, 6, 215-222.	7.1	457
6	From Glycogen to Amylopectin: A Model for the Biogenesis of the Plant Starch Granule. Cell, 1996, 86, 349-352.	28.9	445
7	Genetics of Mitochondrial Biogenesis. Annual Review of Biochemistry, 1986, 55, 249-285.	11.1	441
8	Characterization of the maize gene sugary1, a determinant of starch composition in kernels.. Plant Cell, 1995, 7, 417-429.	6.6	425
9	[33] High-expression vectors with multiple cloning sites for construction of trpE fusion genes: pATH vectors. Methods in Enzymology, 1991, 194, 477-490.	1.0	392
10	Characterization of the yeast HSP60 gene coding for a mitochondrial assembly factor. Nature, 1989, 337, 655-659.	27.8	365
11	Characterization of two members of the rho gene family from the yeast Saccharomyces cerevisiae.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 779-783.	7.1	272
12	Characterization of dull1, a Maize Gene Coding for a Novel Starch Synthase. Plant Cell, 1998, 10, 399-412.	6.6	230
13	Candida albicans ALS3 and insights into the nature of the ALS gene family. Current Genetics, 1998, 33, 451-459.	1.7	217
14	Interactions between the bud emergence proteins Bem1p and Bem2p and Rho-type GTPases in yeast.. Journal of Cell Biology, 1994, 127, 1395-1406.	5.2	206
15	Starch Biosynthetic Enzymes from Developing Maize Endosperm Associate in Multisubunit Complexes. Plant Physiology, 2008, 146, 1892-1908.	4.8	195
16	Proteins from Multiple Metabolic Pathways Associate with Starch Biosynthetic Enzymes in High Molecular Weight Complexes: A Model for Regulation of Carbon Allocation in Maize Amyloplasts Â Â Â. Plant Physiology, 2009, 149, 1541-1559.	4.8	188
17	Biochemistry and Genetics of Starch Synthesis. Annual Review of Food Science and Technology, 2010, 1, 271-303.	9.9	173
18	Mutational Analysis of the Pullulanase-Type Debranching Enzyme of Maize Indicates Multiple Functions in Starch Metabolism. Plant Cell, 2003, 15, 666-680.	6.6	172

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19	Molecular characterization demonstrates that the Zea mays gene sugary2 codes for the starch synthase isoform SSIIa. Plant Molecular Biology, 2004, 54, 865-879.	3.9	152
20	Identification of the Soluble Starch Synthase Activities of Maize Endosperm1. Plant Physiology, 1999, 120, 205-216.	4.8	149
21	Molecular Structure of Three Mutations at the Maizesugary1 Locus and Their Allele-Specific Phenotypic Effects. Plant Physiology, 2001, 125, 1406-1418.	4.8	138
22	Proteome and phosphoproteome analysis of starch granule-associated proteins from normal maize and mutants affected in starch biosynthesis. Journal of Experimental Botany, 2008, 59, 3395-3406.	4.8	136
23	Regulation of dimorphism in Saccharomyces cerevisiae: involvement of the novel protein kinase homolog Elm1p and protein phosphatase 2A.. Molecular and Cellular Biology, 1993, 13, 5567-5581.	2.3	135
24	Mutations Affecting Starch Synthase III in Arabidopsis Alter Leaf Starch Structure and Increase the Rate of Starch Synthesis. Plant Physiology, 2005, 138, 663-674.	4.8	135
25	Identification of the novel protein QQS as a component of the starch metabolic network in Arabidopsis leaves. Plant Journal, 2009, 58, 485-498.	5.7	118
26	Overlapping functions of the starch synthases SSII and SSIII in amylopectin biosynthesis in Arabidopsis. BMC Plant Biology, 2008, 8, 96.	3.6	111
27	Purification and Molecular Genetic Characterization of ZPU1, a Pullulanase-Type Starch-Debranching Enzyme from Maize1. Plant Physiology, 1999, 119, 255-266.	4.8	101
28	Characterization of SU1 Isoamylase, a Determinant of Storage Starch Structure in Maize1. Plant Physiology, 1998, 117, 425-435.	4.8	100
29	Towards the rational design of cereal starches. Current Opinion in Plant Biology, 2005, 8, 204-210.	7.1	100
30	Mutants of Chlamydomonas reinhardtii with physical alterations in their chloroplast DNA. Plasmid, 1982, 7, 133-151.	1.4	88
31	Control of Saccharomyces cerevisiaeFilamentous Growth by Cyclin-Dependent Kinase Cdc28. Molecular and Cellular Biology, 1999, 19, 1369-1380.	2.3	86
32	Maize opaque5 Encodes Monogalactosyldiacylglycerol Synthase and Specifically Affects Galactolipids Necessary for Amyloplast and Chloroplast Function Â Â. Plant Cell, 2011, 23, 2331-2347.	6.6	85
33	Functions of Heteromeric and Homomeric Isoamylase-Type Starch-Debranching Enzymes in Developing Maize Endosperm Â Â. Plant Physiology, 2010, 153, 956-969.	4.8	84
34	Functional Interactions between Starch Synthase III and Isoamylase-Type Starch-Debranching Enzyme in Maize Endosperm Â Â. Plant Physiology, 2012, 158, 679-692.	4.8	83
35	Immunological similarities between specific chloroplast ribosomal proteins from Chlamydomonas reinhardtii and ribosomal proteins from Escherichia coli.. Molecular Biology and Evolution, 1984, 1, 317-34.	8.9	81
36	Integrated functions among multiple starch synthases determine both amylopectin chain length and branch linkage location in Arabidopsis leaf starch. Journal of Experimental Botany, 2011, 62, 4547-4559.	4.8	76

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37	Mechanistic Investigation of a Starch-Branching Enzyme Using Hydrodynamic Volume SEC Analysis. Biomacromolecules, 2008, 9, 954-965.	5.4	67
38	Functions of Multiple Genes Encoding ADP-Glucose Pyrophosphorylase Subunits in Maize Endosperm, Embryo, and Leaf Â Â Â. Plant Physiology, 2014, 164, 596-611.	4.8	65
39	Purification and Characterization of Soluble Starch Synthases from Maize Endosperm. Archives of Biochemistry and Biophysics, 2000, 373, 135-146.	3.0	59
40	The small GTP-binding protein Rho1p is localized on the Golgi apparatus and post-Golgi vesicles in Saccharomyces cerevisiae.. Journal of Cell Biology, 1991, 115, 309-319.	5.2	55
41	Biochemical Characterization of Wild-Type and Mutant Isoamylases of Chlamydomonas reinhardtii Supports a Function of the Multimeric Enzyme Organization in Amylopectin Maturation. Plant Physiology, 2001, 125, 1723-1731.	4.8	54
42	Chloroplast ribosomal proteins of Chlamydomonas synthesized in the cytoplasm are made as precursors.. Journal of Cell Biology, 1984, 98, 2011-2018.	5.2	51
43	STA11, a Chlamydomonas reinhardtii Locus Required for Normal Starch Granule Biogenesis, Encodes Disproportionating Enzyme. Further Evidence for a Function of Î±-1,4 Glucanotransferases during Starch Granule Biosynthesis in Green Algae. Plant Physiology, 2003, 132, 137-145.	4.8	47
44	Two Loci Control Phytoglycogen Production in the Monocellular Green Alga Chlamydomonas reinhardtii. Plant Physiology, 2001, 125, 1710-1722.	4.8	45
45	Molecular Analysis of Cytoplasmic Genetic Variation in Holstein Cows. Journal of Animal Science, 1989, 67, 1926.	0.5	44
46	Functional Interactions between Heterologously Expressed Starch-Branching Enzymes of Maize and the Glycogen Synthases of Brewer's Yeast. Plant Physiology, 2002, 128, 1189-1199.	4.8	40
47	Expression of human brain hexokinase in Escherichiacoli: Purification and characterization of the expressed enzyme. Biochemical and Biophysical Research Communications, 1991, 177, 305-311.	2.1	37
48	Molecular Structure of Starches from Maize Mutants Deficient in Starch Synthase III. Journal of Agricultural and Food Chemistry, 2013, 61, 9899-9907.	5.2	37
49	Effects of longâ€term exposure to elevated temperature on Zea mays endosperm development during grain fill. Plant Journal, 2019, 99, 23-40.	5.7	37
50	Genome assembly and population genomic analysis provide insights into the evolution of modern sweet corn. Nature Communications, 2021, 12, 1227.	12.8	37
51	Enzymatic properties and regulation of ZPU1, the maize pullulanase-type starch debranching enzyme. Archives of Biochemistry and Biophysics, 2002, 406, 21-32.	3.0	36
52	Functions of maize genes encoding pyruvate phosphate dikinase in developing endosperm. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E24-E33.	7.1	35
53	DNA sequence and transcript analysis of transposon MuA2, a regulator of Mutator transposable element activity in maize. Plant Molecular Biology, 1993, 21, 1181-1185.	3.9	32
54	Functional analysis of mRNA 3' end formation signals in the convergent and overlapping transcription units of theS.cerevisiaegenesRH01andMRP2. Nucleic Acids Research, 1993, 21, 5500-5508.	14.5	32

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55	One- and Two-dimensional Native PAGE Activity Gel Analyses of Maize Endosperm Proteins Reveal Functional Interactions between Specific Starch Metabolizing Enzymes. Journal of Applied Glycoscience (1999), 2003, 50, 207-212.	0.7	32
56	Genome wide co-expression among the starch debranching enzyme genes AtISA1, AtISA2, and AtISA3 in Arabidopsis thaliana. Journal of Experimental Botany, 2007, 58, 3323-3342.	4.8	32
57	Distinct Functional Properties of Isoamylase-Type Starch Debranching Enzymes in Monocot and Dicot Leaves. Plant Physiology, 2013, 163, 1363-1375.	4.8	32
58	Function of isoamylaseâ€type starch debranching enzymes <scp>ISA</scp>1 and <scp>ISA</scp>2 in the <scp>Z</scp>ea mays leaf. New Phytologist, 2013, 200, 1009-1021.	7.3	31
59	Cloning and characterization of MRP10, a yeast gene coding for a mitochondrial ribosomal protein. Current Genetics, 1997, 31, 228-234.	1.7	26
60	Serine-threonine protein kinase activity of Elm1p, a regulator of morphologic differentiation in Saccharomyces cerevisiae. FEBS Letters, 1997, 408, 109-114.	2.8	25
61	The Saccharomyces cerevisiae mutation elm4-1 facilitates pseudohyphal differentiation and interacts with a deficiency in phosphoribosylpyrophosphate synthase activity to cause constitutive pseudohyphal growth.. Molecular and Cellular Biology, 1994, 14, 4671-4681.	2.3	22
62	Assembly interdependence among theS. cerevisiae bud neck ring proteins Elm1p, Hsl1p and Cdc12p. Yeast, 2003, 20, 813-826.	1.7	22
63	Engineering 6-phosphogluconate dehydrogenase improves grain yield in heat-stressed maize. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33177-33185.	7.1	22
64	COX24 Codes for a Mitochondrial Protein Required for Processing of the COX1 Transcript. Journal of Biological Chemistry, 2006, 281, 3743-3751.	3.4	21
65	A Yeast Mitochondrial Leader Peptide Functions in vivo as a Dual Targeting Signal for Both Chloroplasts and Mitochondria. Plant Cell, 1990, 2, 1249.	6.6	20
66	Phenotypic analysis and molecular cloning of discolored-1 (dsc1), a maize gene required for early kernel development. , 1998, 37, 483-493.		20
67	Maize defective kernel5 is a bacterial TamB homologue required for chloroplast envelope biogenesis. Journal of Cell Biology, 2019, 218, 2638-2658.	5.2	19
68	Mutations in a nuclear gene of Chlamydomonas cause the loss of two chloroplast ribosomal proteins, one synthesized in the chloroplast and the other in the cytoplasm. Current Genetics, 1984, 8, 369-378.	1.7	16
69	The maize gene empty pericarp-2 is required for progression beyond early stages of embryogenesis. Plant Journal, 1997, 12, 901-909.	5.7	16
70	Characterization of dull1, a Maize Gene Coding for a Novel Starch Synthase. Plant Cell, 1998, 10, 399.	6.6	16
71	Comparative inÂvitro analyses of recombinant maize starch synthases SSI, SSIIa, and SSIII reveal direct regulatory interactions and thermosensitivity. Archives of Biochemistry and Biophysics, 2016, 596, 63-72.	3.0	16
72	Recovery of mitochondrial DNA from blood leukocytes using detergent lysis. Biochemical Genetics, 1992, 30, 27-33.	1.7	15

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73	Direct Characterization of the Maize Starch Synthase IIa Product Shows Maltodextrin Elongation Occurs at the Non-reducing End. Journal of Biological Chemistry, 2016, 291, 24951-24960.	3.4	6
74	Characterization of the Maize Gene sugary1, a Determinant of Starch Composition in Kernels. Plant Cell, 1995, 7, 417.	6.6	5
75	Genetic Analysis Indicates Maize Pullulanase- and Isoamylase-type Starch Debranching Enzymes Have Partially Overlapping Functions in Starch Metabolism. Journal of Applied Glycoscience (1999), 2003, 50, 191-195.	0.7	4
76	Seed Starch Synthesis. , 2009, , 439-456.		3
77	Direct Determination of the Site of Addition of Glucosyl Units to Maltooligosaccharide Acceptors Catalyzed by Maize Starch Synthase I. Frontiers in Plant Science, 2018, 9, 1252.	3.6	2
78	Central metabolism and its spatial heterogeneity in maize endosperm.. , 2017, , 134-148.		1
79	Transgenic analysis of maize endosperm metabolism. FASEB Journal, 2019, 33, 486.4.	0.5	0