William S Adney

List of Publications by Year
in descending order

57 papers	7,321 citations	109321 35 h-index	182427 51 g-index
57 all docs	57 docs citations	57 times ranked	7353 citing authors

#	Article	IF	Citations
1	Biomass Recalcitrance: Engineering Plants and Enzymes for Biofuels Production. Science, 2007, 315, 804-807.	12.6	3,749
2	Cellulase digestibility of pretreated biomass is limited by cellulose accessibility. Biotechnology and Bioengineering, 2007, 98, 112-122.	3.3	457
3	Crystal Structure of Thermostable Family 5 Endocellulase E1 fromAcidothermus cellulolyticusin Complex with Cellotetraoseâ€,â€¡. Biochemistry, 1996, 35, 10648-10660.	2.5	236
4	Synergistic enhancement of cellobiohydrolase performance on pretreated corn stover by addition of xylanase and esterase activities. Bioresource Technology, 2008, 99, 4997-5005.	9.6	218
5	Can delignification decrease cellulose digestibility in acid pretreated corn stover?. Cellulose, 2009, 16, 677-686.	4.9	129
6	The impact of cell wall acetylation on corn stover hydrolysis by cellulolytic and xylanolytic enzymes. Cellulose, 2009, 16, 711-722.	4.9	126
7	Implications of cellobiohydrolase glycosylation for use in biomass conversion. Biotechnology for Biofuels, 2008, 1, 10.	6.2	118
8	Identification of Amino Acids Responsible for Processivity in a Family 1 Carbohydrate-Binding Module from a Fungal Cellulase. Journal of Physical Chemistry B, 2010, 114, 1447-1453.	2.6	116
9	Heterologous expression of glycosyl hydrolases in planta: a new departure for biofuels. Trends in Biotechnology, 2008, 26, 413-424.	9.3	115
10	Complete genome of the cellulolytic thermophile Acidothermus cellulolyticus 11B provides insights into its ecophysiological and evolutionary adaptations. Genome Research, 2009, 19, 1033-1043.	5.5	109
11	Harnessing glycosylation to improve cellulase activity. Current Opinion in Biotechnology, 2012, 23, 338-345.	6.6	107
12	Heterologous Expression and Extracellular Secretion of Cellulolytic Enzymes byZymomonas mobilis. Applied and Environmental Microbiology, 2010, 76, 6360-6369.	3.1	99
13	The Metagenome of an Anaerobic Microbial Community Decomposing Poplar Wood Chips. PLoS ONE, 2012, 7, e36740.	2.5	98
14	The O-Glycosylated Linker from the Trichoderma reesei Family 7 Cellulase Is a Flexible, Disordered Protein. Biophysical Journal, 2010, 99, 3773-3781.	0.5	96
15	Hydrolysis of cellulose using ternary mixtures of purified celluloses. Applied Biochemistry and Biotechnology, 1998, 70-72, 395-403.	2.9	87
16	Molecular modeling suggests induced fit of Family I carbohydrate-binding modules with a broken-chain cellulose surface. Protein Engineering, Design and Selection, 2007, 20, 179-187.	2.1	79
17	Probing the role of N-linked glycans in the stability and activity of fungal cellobiohydrolases by mutational analysis. Cellulose, 2009, 16, 699-709.	4.9	79
18	The Energy Landscape for the Interaction of the Family 1 Carbohydrate-Binding Module and the Cellulose Surface is Altered by Hydrolyzed Glycosidic Bonds. Journal of Physical Chemistry B, 2009, 113, 10994-11002.	2.6	75

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19	Engineering enhanced cellobiohydrolase activity. Nature Communications, 2018, 9, 1186.	12.8	72
20	Probing Carbohydrate Product Expulsion from a Processive Cellulase with Multiple Absolute Binding Free Energy Methods. Journal of Biological Chemistry, 2011, 286, 18161-18169.	3.4	69
21	Expression and characterization of Acidothermus cellulolyticus E1 endoglucanase in transgenic duckweed Lemna minor 8627. Bioresource Technology, 2007, 98, 2866-2872.	9.6	67
22	Anaerobic digestion of lignocellulosic biomass and wastes. Applied Biochemistry and Biotechnology, 1991, 30, 165-183.	2.9	65
23	Advanced Bioethanol Production Technologies: A Perspective. ACS Symposium Series, 1997, , 2-45.	0.5	65
24	Computational Investigation of Glycosylation Effects on a Family 1 Carbohydrate-binding Module. Journal of Biological Chemistry, 2012, 287, 3147-3155.	3.4	64
25	Detecting cellulase penetration into corn stover cell walls by immunoâ€electron microscopy. Biotechnology and Bioengineering, 2009, 103, 480-489.	3.3	56
26	Heterologous protein expression in Hypocrea jecorina: A historical perspective and new developments. Biotechnology Advances, 2015, 33, 142-154.	11.7	55
27	Cloning and Expression of Trichoderma reesei Cellobiohydrolase I in Pichia pastoris. Biotechnology Progress, 1999, 15, 828-833.	2.6	53
28	Simultaneous saccharification and fermentation of pretreated hardwoods. Applied Biochemistry and Biotechnology, 1997, 62, 99-104.	2.9	52
29	Catalytically Enhanced Endocellulase Cel5A from <I>Acidothermus cellulolyticus</I>. Applied Biochemistry and Biotechnology, 2005, 121, 0129-0148.	2.9	49
30	Computational simulations of the Trichoderma reesei cellobiohydrolase I acting on microcrystalline cellulose Iβ: the enzymeâ€“substrate complex. Carbohydrate Research, 2009, 344, 1984-1992.	2.3	49
31	A new thermostable endoglucanase,Acidothermus cellulolyticus E1. Applied Biochemistry and Biotechnology, 1994, 45-46, 245-256.	2.9	48
32	Heterologous Expression of Aspergillus niger β-d-Xylosidase (XlnD): Characterization on Lignocellulosic Substrates. Applied Biochemistry and Biotechnology, 2008, 146, 57-68.	2.9	45
33	Isolation and characterization of two forms of β-d-glucosidase fromAspergillus niger. Applied Biochemistry and Biotechnology, 1993, 39-40, 213-225.	2.9	42
34	Investigation of the Cell-Wall Loosening Protein Expansin as a Possible Additive in the Enzymatic Saccharification of Lignocellulosic Biomass. Applied Biochemistry and Biotechnology, 2000, 84-86, 217-224.	2.9	41
35	Bioprospecting metagenomics of decaying wood: mining for new glycoside hydrolases. Biotechnology for Biofuels, 2011, 4, 23.	6.2	40
36	Fungal glycoside hydrolases for saccharification of lignocellulose: outlook for new discoveries fueled by genomics and functional studies. Cellulose, 2009, 16, 687-697.	4.9	32

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37	Cloning and expression of full-lengthTrichoderma reesi cellobiohydrolase I cDNAs inEscherichia coli. Applied Biochemistry and Biotechnology, 1996, 57-58, 389-397.	2.9	29
38	The Unique Binding Mode of Cellulosomal CBM4 from Clostridium thermocellum Cellobiohydrolase A. Journal of Molecular Biology, 2010, 402, 374-387.	4.2	28
39	Molecular simulation evidence for processive motion of Trichoderma reesei Cel7A during cellulose depolymerization. Chemical Physics Letters, 2008, 460, 284-288.	2.6	27
40	Fungal genome sequencing and bioenergy. Fungal Biology Reviews, 2008, 22, 1-5.	4.7	27
41	Impact of alg3 gene deletion on growth, development, pigment production, protein secretion, and functions of recombinant Trichoderma reesei cellobiohydrolases in Aspergillus niger. Fungal Genetics and Biology, 2013, 61, 120-132.	2.1	25
42	Use of a new membrane-reactor saccharification assay to evaluate the performance of celluloses under simulated ssf conditions. Applied Biochemistry and Biotechnology, 1997, 63-65, 585-595.	2.9	23
43	Synergism Between Purified Bacterial and Fungal Cellulases. ACS Symposium Series, 1996, , 113-141.	0.5	17
44	Cellulase Assays. ACS Symposium Series, 1994, , 218-235.	0.5	12
45	Heterologous Expression of Trichoderma reesei 1,4-Î²-D-Glucan Cellobiohydrolase (Cel 7A). ACS Symposium Series, 2003, , 403-437.	0.5	12
46	Biomass Conversion. , 2007, , 1449-1548.		10
47	Initial Approaches to Artificial Cellulase Systems for Conversion of Biomass to Ethanol. ACS Symposium Series, 1996, , 208-236.	0.5	9
48	Enzymes for Anaerobic Municipal Solid Waste Disposal. ACS Symposium Series, 1991, , 22-35.	0.5	8
49	Glycoside Hydrolase Gene Cluster of Acidothermus cellulolyticus. ACS Symposium Series, 2003, , 332-360.	0.5	8
50	Comparison of Protein Contents of Cellulase Preparations in a Worldwide Round-Robin Assay. ACS Symposium Series, 1996, , 256-271.	0.5	7
51	Biomass Conversion. , 2017, , 285-419.		7
52	Cloning and Heterologous Expression of the Gene Encoding a Family 7 Glycosyl Hydrolase from Penicillium funiculosum. ACS Symposium Series, 2004, , 170-193.	0.5	4
53	Understanding the Biomass Decay Community. , 0, , 454-479.		4
54	Energy Storage in Cellulase Linker Peptides?. ACS Symposium Series, 2010, , 119-134.	0.5	4

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55	Biomass Conversion. , 2012, , 1249-1322.		3
56	Expression of Microbispora bispora Bgl B Î²-D-Glucosidase in Streptomyces lividans. ACS Symposium Series, 1997, , 154-171.	0.5	0
57	Two Novel Alkalotolerant Dextranases from Streptomyces anulatus. ACS Symposium Series, 2000, , 222-235.	0.5	0