List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Microbial Cellulose Utilization: Fundamentals and Biotechnology. Microbiology and Molecular Biology Reviews, 2002, 66, 506-577.	6.6	3,654
2	Toward an aggregated understanding of enzymatic hydrolysis of cellulose: Noncomplexed cellulase systems. Biotechnology and Bioengineering, 2004, 88, 797-824.	3.3	1,537
3	Beneficial Biofuels—The Food, Energy, and Environment Trilemma. Science, 2009, 325, 270-271.	12.6	1,335
4	Consolidated bioprocessing of cellulosic biomass: an update. Current Opinion in Biotechnology, 2005, 16, 577-583.	6.6	1,243
5	How biotech can transform biofuels. Nature Biotechnology, 2008, 26, 169-172.	17.5	984
6	Fuel Ethanol from Cellulosic Biomass. Science, 1991, 251, 1318-1323.	12.6	875
7	Biocommodity Engineering. Biotechnology Progress, 1999, 15, 777-793.	2.6	636
8	OVERVIEW AND EVALUATION OF FUEL ETHANOL FROM CELLULOSIC BIOMASS: Technology, Economics, the Environment, and Policy. Annual Review of Environment and Resources, 1996, 21, 403-465.	1.2	585
9	Recent progress in consolidated bioprocessing. Current Opinion in Biotechnology, 2012, 23, 396-405.	6.6	536
10	Fractionating recalcitrant lignocellulose at modest reaction conditions. Biotechnology and Bioengineering, 2007, 97, 214-223.	3.3	519
11	A comparison of liquid hot water and steam pretreatments of sugar cane bagasse for bioconversion to ethanol. Bioresource Technology, 2002, 81, 33-44.	9.6	507
12	A Transition from Cellulose Swelling to Cellulose Dissolution byo-Phosphoric Acid:Â Evidence from Enzymatic Hydrolysis and Supramolecular Structure. Biomacromolecules, 2006, 7, 644-648.	5.4	478
13	Metabolic engineering of a thermophilic bacterium to produce ethanol at high yield. Proceedings of the United States of America, 2008, 105, 13769-13774.	7.1	325
14	Cellulosic ethanol: status and innovation. Current Opinion in Biotechnology, 2017, 45, 202-211.	6.6	316
15	High Ethanol Titers from Cellulose by Using Metabolically Engineered Thermophilic, Anaerobic Microbes. Applied and Environmental Microbiology, 2011, 77, 8288-8294.	3.1	281
16	Coculture of Staphylococcus aureus with Pseudomonas aeruginosa Drives S. aureus towards Fermentative Metabolism and Reduced Viability in a Cystic Fibrosis Model. Journal of Bacteriology, 2015, 197, 2252-2264.	2.2	272
17	High-Value Renewable Energy from Prairie Grasses. Environmental Science & Technology, 2002, 36, 2122-2129.	10.0	261
18	Determination of the Number-Average Degree of Polymerization of Cellodextrins and Cellulose with Application to Enzymatic Hydrolysis. Biomacromolecules, 2005, 6, 1510-1515.	5.4	245

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19	Hydrolysis and fermentation of amorphous cellulose by recombinant Saccharomyces cerevisiae. Metabolic Engineering, 2007, 9, 87-94.	7.0	233
20	Biomass Production in Switchgrass across the United States: Database Description and Determinants of Yield. Agronomy Journal, 2010, 102, 1158-1168.	1.8	232
21	Largeâ€scale production, harvest and logistics of switchgrass ( <i>Panicum virgatum L.</i> ) – current technology and envisioning a mature technology. Biofuels, Bioproducts and Biorefining, 2009, 3, 124-141.	3.7	217
22	Likely features and costs of mature biomass ethanol technology. Applied Biochemistry and Biotechnology, 1996, 57-58, 741-761.	2.9	216
23	Cellulose utilization by Clostridium thermocellum: Bioenergetics and hydrolysis product assimilation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7321-7325.	7.1	212
24	Enzyme-microbe synergy during cellulose hydrolysis by Clostridium thermocellum. Proceedings of the United States of America, 2006, 103, 16165-16169.	7.1	202
25	A functionally based model for hydrolysis of cellulose by fungal cellulase. Biotechnology and Bioengineering, 2006, 94, 888-898.	3.3	201
26	Development of <i>pyrF-</i> Based Genetic System for Targeted Gene Deletion in <i>Clostridium thermocellum</i> and Creation of a <i>pta</i> Mutant. Applied and Environmental Microbiology, 2010, 76, 6591-6599.	3.1	195
27	Consolidated Bioprocessing for Bioethanol Production Using Saccharomyces cerevisiae. Advances in Biochemical Engineering/Biotechnology, 2007, 108, 205-235.	1.1	170
28	Mutant alcohol dehydrogenase leads to improved ethanol tolerance in <i>Clostridium thermocellum</i> . Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13752-13757.	7.1	159
29	A Comparison between Hot Liquid Water and Steam Fractionation of Corn Fiber. Industrial & Engineering Chemistry Research, 2001, 40, 2934-2941.	3.7	149
30	Fermentation of Cellulosic Substrates in Batch and Continuous Culture by <i>Clostridium thermocellum</i> . Applied and Environmental Microbiology, 1989, 55, 3131-3139.	3.1	141
31	The grand challenge of cellulosic biofuels. Nature Biotechnology, 2017, 35, 912-915.	17.5	132
32	Conversion of lignocellulosics pretreated with liquid hot water to ethanol. Applied Biochemistry and Biotechnology, 1996, 57-58, 157-170.	2.9	129
33	Conversion of paper sludge to ethanol in a semicontinuous solids-fed reactor. Bioprocess and Biosystems Engineering, 2003, 26, 93-101.	3.4	129
34	Recent process improvements for the ammonia fiber expansion (AFEX) process and resulting reductions in minimum ethanol selling price. Bioresource Technology, 2008, 99, 8429-8435.	9.6	127
35	Transformation of Clostridium Thermocellum by Electroporation. Methods in Enzymology, 2012, 510, 317-330.	1.0	124
36	Take a Closer Look: Biofuels Can Support Environmental, Economic and Social Goals. Environmental Science & Technology, 2014, 48, 7200-7203.	10.0	120

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37	The role of bioenergy in a climate-changing world. Environmental Development, 2017, 23, 57-64.	4.1	120
38	Simultaneous achievement of high ethanol yield and titer in Clostridium thermocellum. Biotechnology for Biofuels, 2016, 9, 116.	6.2	116
39	Regulation of Cellulase Synthesis in Batch and Continuous Cultures of Clostridium thermocellum. Journal of Bacteriology, 2005, 187, 99-106.	2.2	115
40	Ethanol production by engineered thermophiles. Current Opinion in Biotechnology, 2015, 33, 130-141.	6.6	114
41	Lignocellulose deconstruction in the biosphere. Current Opinion in Chemical Biology, 2017, 41, 61-70.	6.1	110
42	Robust paths to net greenhouse gas mitigation and negative emissions via advanced biofuels. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21968-21977.	7.1	110
43	Deletion of the Cel48S cellulase from <i>Clostridium thermocellum</i> . Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17727-17732.	7.1	108
44	Comparative analysis of efficiency, environmental impact, and process economics for mature biomass refining scenarios. Biofuels, Bioproducts and Biorefining, 2009, 3, 247-270.	3.7	107
45	The need for biofuels as part of a low carbon energy future. Biofuels, Bioproducts and Biorefining, 2015, 9, 476-483.	3.7	107
46	Cellulose- and Xylan-Degrading Thermophilic Anaerobic Bacteria from Biocompost. Applied and Environmental Microbiology, 2011, 77, 2282-2291.	3.1	105
47	Electrotransformation of Clostridium thermocellum. Applied and Environmental Microbiology, 2004, 70, 883-890.	3.1	102
48	Functional expression of cellobiohydrolases in Saccharomyces cerevisiae towards one-step conversion of cellulose to ethanol. Enzyme and Microbial Technology, 2007, 40, 1291-1299.	3.2	102
49	Dramatic performance of <i>Clostridium thermocellum</i> explained by its wide range of cellulase modalities. Science Advances, 2016, 2, e1501254.	10.3	99
50	The exometabolome of Clostridium thermocellum reveals overflow metabolism at high cellulose loading. Biotechnology for Biofuels, 2014, 7, 155.	6.2	96
51	Elimination of hydrogenase active site assembly blocks H2 production and increases ethanol yield in Clostridium thermocellum. Biotechnology for Biofuels, 2015, 8, 20.	6.2	96
52	Modeling simultaneous saccharification and fermentation of lignocellulose to ethanol in batch and continuous reactors. Enzyme and Microbial Technology, 1995, 17, 797-803.	3.2	95
53	Quantification of Cell and Cellulase Mass Concentrations during Anaerobic Cellulose Fermentation:Â Development of an Enzyme-Linked Immunosorbent Assay-Based Method with Application toClostridiumthermocellumBatch Cultures. Analytical Chemistry, 2003, 75, 219-227.	6.5	95
54	Natural Competence in <i>Thermoanaerobacter</i> and <i>Thermoanaerobacterium</i> Species. Applied and Environmental Microbiology, 2010, 76, 4713-4719.	3.1	93

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55	Toward low-cost biological and hybrid biological/catalytic conversion of cellulosic biomass to fuels. Energy and Environmental Science, 2022, 15, 938-990.	30.8	93
56	The role of biomass in America's energy future: framing the analysis. Biofuels, Bioproducts and Biorefining, 2009, 3, 113-123.	3.7	92
57	Atypical Glycolysis in Clostridium thermocellum. Applied and Environmental Microbiology, 2013, 79, 3000-3008.	3.1	92
58	Protein feeds coproduction in biomass conversion to fuels and chemicals. Biofuels, Bioproducts and Biorefining, 2009, 3, 219-230.	3.7	90
59	Closing the carbon balance for fermentation by Clostridium thermocellum (ATCC 27405). Bioresource Technology, 2012, 103, 293-299.	9.6	90
60	Kinetics and Relative Importance of Phosphorolytic and Hydrolytic Cleavage of Cellodextrins and Cellobiose in Cell Extracts of Clostridium thermocellum. Applied and Environmental Microbiology, 2004, 70, 1563-1569.	3.1	89
61	Coproduction of ethanol and power from switchgrass. Biofuels, Bioproducts and Biorefining, 2009, 3, 195-218.	3.7	87
62	Identification of the [FeFe]-Hydrogenase Responsible for Hydrogen Generation in <i>Thermoanaerobacterium saccharolyticum</i> and Demonstration of Increased Ethanol Yield via Hydrogenase Knockout. Journal of Bacteriology, 2009, 191, 6457-6464.	2.2	86
63	Cellodextrin preparation by mixed-acid hydrolysis and chromatographic separation. Analytical Biochemistry, 2003, 322, 225-232.	2.4	85
64	Sequencing of Multiple Clostridial Genomes Related to Biomass Conversion and Biofuel Production. Journal of Bacteriology, 2010, 192, 6494-6496.	2.2	81
65	Mutant selection and phenotypic and genetic characterization of ethanol-tolerant strains of Clostridium thermocellum. Applied Microbiology and Biotechnology, 2011, 92, 641-652.	3.6	79
66	Bioenergy crop models: descriptions, data requirements, and future challenges. GCB Bioenergy, 2012, 4, 620-633.	5.6	79
67	Redirecting carbon flux through exogenous pyruvate kinase to achieve high ethanol yields in Clostridium thermocellum. Metabolic Engineering, 2013, 15, 151-158.	7.0	78
68	Biological lignocellulose solubilization: comparative evaluation of biocatalysts and enhancement via cotreatment. Biotechnology for Biofuels, 2016, 9, 8.	6.2	78
69	The Bifunctional Alcohol and Aldehyde Dehydrogenase Gene, <i>adhE</i> , Is Necessary for Ethanol Production in Clostridium thermocellum and Thermoanaerobacterium saccharolyticum. Journal of Bacteriology, 2015, 197, 1386-1393.	2.2	77
70	Cloning of l-lactate dehydrogenase and elimination of lactic acid production via gene knockout in Thermoanaerobacterium saccharolyticum JW/SL-YS485. Applied Microbiology and Biotechnology, 2004, 65, 600-5.	3.6	76
71	Energy Returns on Ethanol Production. Science, 2006, 312, 1746-1748.	12.6	71
72	End-product pathways in the xylose fermenting bacterium, Thermoanaerobacterium saccharolyticum. Enzyme and Microbial Technology, 2008, 42, 453-458.	3.2	71

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73	Dcm methylation is detrimental to plasmid transformation in Clostridium thermocellum. Biotechnology for Biofuels, 2012, 5, 30.	6.2	71
74	Enhanced Microbial Utilization of Recalcitrant Cellulose by an <i>Ex Vivo</i> Cellulosome-Microbe Complex. Applied and Environmental Microbiology, 2012, 78, 1437-1444.	3.1	69
75	A Product-Nonspecific Framework for Evaluating the Potential of Biomass-Based Products to Displace Fossil Fuels. Journal of Industrial Ecology, 2003, 7, 17-32.	5.5	67
76	A defined growth medium with very low background carbon for culturing <i>Clostridium thermocellum</i> . Journal of Industrial Microbiology and Biotechnology, 2012, 39, 943-947.	3.0	65
77	Lignocellulose fermentation and residual solids characterization for senescent switchgrass fermentation by <i>Clostridium thermocellum</i> in the presence and absence of continuous <i>in situ</i> ball-milling. Energy and Environmental Science, 2017, 10, 1252-1261.	30.8	65
78	Potential for Enhanced Nutrient Cycling through Coupling of Agricultural and Bioenergy Systems. Crop Science, 2007, 47, 1327-1335.	1.8	64
79	Diversity of Bacteria and Glycosyl Hydrolase Family 48 Genes in Cellulolytic Consortia Enriched from Thermophilic Biocompost. Applied and Environmental Microbiology, 2010, 76, 3545-3553.	3.1	63
80	Metabolic engineering of Thermoanaerobacterium saccharolyticum for n-butanol production. Metabolic Engineering, 2014, 21, 17-25.	7.0	62
81	Glycolysis without pyruvate kinase in Clostridium thermocellum. Metabolic Engineering, 2017, 39, 169-180.	7.0	62
82	Ethanol production from paper sludge by simultaneous saccharification and coâ€fermentation using recombinant xyloseâ€fermenting microorganisms. Biotechnology and Bioengineering, 2010, 107, 235-244.	3.3	60
83	Development of both type l–B and type II CRISPR/Cas genome editing systems in the cellulolytic bacterium Clostridium thermocellum. Metabolic Engineering Communications, 2020, 10, e00116.	3.6	60
84	Increase in Ethanol Yield via Elimination of Lactate Production in an Ethanol-Tolerant Mutant of Clostridium thermocellum. PLoS ONE, 2014, 9, e86389.	2.5	60
85	Large-scale fuel ethanol from lignocellulose. Applied Biochemistry and Biotechnology, 1990, 24-25, 695-719.	2.9	59
86	Projected mature technology scenarios for conversion of cellulosic biomass to ethanol with coproduction thermochemical fuels, power, and/or animal feed protein. Biofuels, Bioproducts and Biorefining, 2009, 3, 231-246.	3.7	59
87	Engineering electron metabolism to increase ethanol production in Clostridium thermocellum. Metabolic Engineering, 2017, 39, 71-79.	7.0	58
88	Metabolic engineering of Clostridium thermocellum for n-butanol production from cellulose. Biotechnology for Biofuels, 2019, 12, 186.	6.2	58
89	Conversion for Avicel and AFEX pretreated corn stover by Clostridium thermocellum and simultaneous saccharification and fermentation: Insights into microbial conversion of pretreated cellulosic biomass. Bioresource Technology, 2011, 102, 8040-8045.	9.6	57
90	Cofactor Specificity of the Bifunctional Alcohol and Aldehyde Dehydrogenase (AdhE) in Wild-Type and Mutant Clostridium thermocellum and Thermoanaerobacteriumsaccharolyticum. Journal of Bacteriology, 2015, 197, 2610-2619.	2.2	56

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91	Comparative analysis of the ability of Clostridium clariflavum strains and Clostridium thermocellumto utilize hemicellulose and unpretreated plant material. Biotechnology for Biofuels, 2014, 7, 136.	6.2	55
92	Investigation of the ethanol tolerance of Clostridium thermosaccharolyticum in continuous culture. Biotechnology Progress, 1995, 11, 276-281.	2.6	54
93	Cloning and expression of theClostridium thermocellumL-lactate dehydrogenase gene inEscherichia coliand enzyme characterization. Canadian Journal of Microbiology, 2004, 50, 845-851.	1.7	53
94	Bioenergy and African transformation. Biotechnology for Biofuels, 2015, 8, 18.	6.2	53
95	Total global agricultural land footprint associated with UK food supply 1986–2011. Global Environmental Change, 2017, 43, 72-81.	7.8	53
96	Identifying promoters for gene expression in Clostridium thermocellum. Metabolic Engineering Communications, 2015, 2, 23-29.	3.6	52
97	Adsorption ofClostridium thermocellum cellulases onto pretreated mixed hardwood, avicel, and lignin. Biotechnology and Bioengineering, 1993, 42, 899-907.	3.3	51
98	Hydrolysis of dilute acid pretreated mixed hardwood and purified microcrystalline cellulose by cell-free broth fromClostridium thermocellum. Biotechnology and Bioengineering, 1987, 29, 92-100.	3.3	50
99	Characterization of <i>Clostridium thermocellum</i> strains with disrupted fermentation end-product pathways. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 725-734.	3.0	50
100	Strain and bioprocess improvement of a thermophilic anaerobe for the production of ethanol from wood. Biotechnology for Biofuels, 2016, 9, 125.	6.2	50
101	The ethanol pathway from Thermoanaerobacterium saccharolyticum improves ethanol production in Clostridium thermocellum. Metabolic Engineering, 2017, 42, 175-184.	7.0	49
102	Metabolic and evolutionary responses of Clostridium thermocellum to genetic interventions aimed at improving ethanol production. Biotechnology for Biofuels, 2020, 13, 40.	6.2	49
103	Complete Genome Sequence of Clostridium clariflavum DSM 19732. Standards in Genomic Sciences, 2012, 6, 104-115.	1.5	48
104	Salt Accumulation Resulting from Base Added for pH Control, and Not Ethanol, Limits Growth of Thermoanaerobacterium thermosaccharolyticum HG-8 at Elevated Feed Xylose Concentrations in Continuous Culture. Biotechnology Progress, 2001, 17, 118-125.	2.6	47
105	Multiple levers for overcoming the recalcitrance of lignocellulosic biomass. Biotechnology for Biofuels, 2019, 12, 15.	6.2	47
106	Continuous fermentation of cellulosic biomass to ethanol. Applied Biochemistry and Biotechnology, 1993, 39-40, 587-600.	2.9	46
107	Form and Function of Clostridium thermocellum Biofilms. Applied and Environmental Microbiology, 2013, 79, 231-239.	3.1	46
108	Physiological roles of pyruvate ferredoxin oxidoreductase and pyruvate formate-lyase in Thermoanaerobacterium saccharolyticum JW/SL-YS485. Biotechnology for Biofuels, 2015, 8, 138.	6.2	45

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109	Development of a thermophilic coculture for corn fiber conversion to ethanol. Nature Communications, 2020, 11, 1937.	12.8	45
110	Likely Features and Costs of Mature Biomass Ethanol Technology. , 1996, , 741-761.		45
111	Perspective: A new hope for Africa. Nature, 2011, 474, S20-S21.	27.8	44
112	Thermodynamic analysis of the pathway for ethanol production from cellobiose in Clostridium thermocellum. Metabolic Engineering, 2019, 55, 161-169.	7.0	44
113	Quantitative determination of cellulase concentration as distinct from cell concentration in studies of microbial cellulose utilization: Analytical framework and methodological approach. Biotechnology and Bioengineering, 2002, 77, 467-475.	3.3	43
114	Characterization of 13 newly isolated strains of anaerobic, cellulolytic, thermophilic bacteria. Journal of Industrial Microbiology and Biotechnology, 2001, 27, 275-280.	3.0	42
115	Simultaneous saccharification and coâ€fermentation of paper sludge to ethanol by <i>Saccharomyces cerevisiae</i> RWB222—Part I: Kinetic modeling and parameters. Biotechnology and Bioengineering, 2009, 104, 920-931.	3.3	42
116	Distillation with intermediate heat pumps and optimal sidestream return. AICHE Journal, 1986, 32, 1347-1359.	3.6	39
117	Elucidating central metabolic redox obstacles hindering ethanol production in Clostridium thermocellum. Metabolic Engineering, 2015, 32, 207-219.	7.0	38
118	Cost competitive secondâ€generation ethanol production from hemicellulose in a Brazilian sugarcane biorefinery. Biofuels, Bioproducts and Biorefining, 2016, 10, 589-602.	3.7	38
119	A Kinetic Model for Simultaneous Saccharification and Fermentation of Avicel With <i>Saccharomyces cerevisiae</i> . Biotechnology and Bioengineering, 2011, 108, 924-933.	3.3	37
120	Development and characterization of stable anaerobic thermophilic methanogenic microbiomes fermenting switchgrass at decreasing residence times. Biotechnology for Biofuels, 2018, 11, 243.	6.2	37
121	Electrotransformation ofClostridium thermosaccharolyticum. Journal of Industrial Microbiology, 1996, 16, 342-347.	0.9	36
122	Utilization of cellobiose by recombinant β-glucosidase-expressing strains of Saccharomyces cerevisiae: characterization and evaluation of the sufficiency of expression. Enzyme and Microbial Technology, 2005, 37, 93-101.	3.2	36
123	Conversion of paper sludge to ethanol. I: Impact of feeding frequency and mixing energy characterization. Bioprocess and Biosystems Engineering, 2006, 30, 27-34.	3.4	36
124	Development and evaluation of methods to infer biosynthesis and substrate consumption in cultures of cellulolytic microorganisms. Biotechnology and Bioengineering, 2013, 110, 2380-2388.	3.3	36
125	Development of a core Clostridium thermocellum kinetic metabolic model consistent with multiple genetic perturbations. Biotechnology for Biofuels, 2017, 10, 108.	6.2	35
126	Kinetic modeling of cellulosic biomass to ethanol via simultaneous saccharification and fermentation: Part I. Accommodation of intermittent feeding and analysis of staged reactors. Biotechnology and Bioengineering, 2009, 102, 59-65.	3.3	34

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127	Role of the CipA Scaffoldin Protein in Cellulose Solubilization, as Determined by Targeted Gene Deletion and Complementation in Clostridium thermocellum. Journal of Bacteriology, 2013, 195, 733-739.	2.2	34
128	Direct microbial conversion. Applied Biochemistry and Biotechnology, 1992, 34-35, 527-541.	2.9	33
129	Formation and characterization of non-growth states in Clostridium thermocellum: spores and L-forms. BMC Microbiology, 2012, 12, 180.	3.3	33
130	The identification of four histidine kinases that influence sporulation in Clostridium thermocellum. Anaerobe, 2014, 28, 109-119.	2.1	33
131	Simultaneous saccharification and coâ€fermentation of paper sludge to ethanol by <i>Saccharomyces cerevisiae</i> RWB222. Part II: Investigation of discrepancies between predicted and observed performance at high solids concentration. Biotechnology and Bioengineering, 2009, 104, 932-938.	3.3	32
132	Deletion of <i>nfnAB</i> in Thermoanaerobacterium saccharolyticum and Its Effect on Metabolism. Journal of Bacteriology, 2015, 197, 2920-2929.	2.2	32
133	A mutation in the AdhE alcohol dehydrogenase of Clostridium thermocellum increases tolerance to several primary alcohols, including isobutanol, n-butanol and ethanol. Scientific Reports, 2019, 9, 1736.	3.3	32
134	Kinetics of cellobiose hydrolysis using cellobiase composites fromTtrichoderma reesei andAspergillus niger. Biotechnology and Bioengineering, 1985, 27, 463-470.	3.3	31
135	Thermophilic ethanol production investigation of ethanol yield and tolerance in continuous culture. Applied Biochemistry and Biotechnology, 1991, 28-29, 549-570.	2.9	31
136	Conversion of paper sludge to ethanol, II: process design and economic analysis. Bioprocess and Biosystems Engineering, 2006, 30, 35-45.	3.4	31
137	Enzyme inactivation by ethanol and development of a kinetic model for thermophilic simultaneous saccharification and fermentation at 50 °C with <i>Thermoanaerobacterium saccharolyticum</i> ALK2. Biotechnology and Bioengineering, 2011, 108, 1268-1278.	3.3	31
138	<i>In Vivo</i> Thermodynamic Analysis of Glycolysis in Clostridium thermocellum and Thermoanaerobacterium saccharolyticum Using <sup>13</sup> C and <sup>2</sup> H Tracers. MSystems, 2020, 5, .	3.8	31
139	Winter rye as a bioenergy feedstock: impact of crop maturity on composition, biological solubilization and potential revenue. Biotechnology for Biofuels, 2015, 8, 35.	6.2	30
140	Metabolic Engineering of & t;i>Thermoanaerobacterium thermosaccharolyticum& t;/i> for Increased n-Butanol Production. Advances in Microbiology, 2013, 03, 46-51.	0.6	30
141	Functional heterologous expression of an engineered full length CipA from Clostridium thermocellum in Thermoanaerobacterium saccharolyticum. Biotechnology for Biofuels, 2013, 6, 32.	6.2	29
142	Enhanced ethanol formation by Clostridium thermocellum via pyruvate decarboxylase. Microbial Cell Factories, 2017, 16, 171.	4.0	29
143	Expressing the Thermoanaerobacterium saccharolyticum pforA in engineered Clostridium thermocellum improves ethanol production. Biotechnology for Biofuels, 2018, 11, 242.	6.2	29
144	Role of Spontaneous Current Oscillations during High-Efficiency Electrotransformation of Thermophilic Anaerobes. Applied and Environmental Microbiology, 2005, 71, 8069-8076.	3.1	28

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145	Computational design and characterization of a temperature-sensitive plasmid replicon for gram positive thermophiles. Journal of Biological Engineering, 2012, 6, 5.	4.7	28
146	Elimination of formate production in <i>Clostridium thermocellum</i> . Journal of Industrial Microbiology and Biotechnology, 2015, 42, 1263-1272.	3.0	28
147	Ferredoxin:NAD <sup>+</sup> Oxidoreductase of Thermoanaerobacterium saccharolyticum and Its Role in Ethanol Formation. Applied and Environmental Microbiology, 2016, 82, 7134-7141.	3.1	28
148	Restriction endonuclease activity in Clostridium thermocellum and Clostridium thermosaccharolyticum. Applied Microbiology and Biotechnology, 1996, 45, 127-131.	3.6	27
149	Conversion of Lignocellulosics Pretreated with Liquid Hot Water to Ethanol. , 1996, , 157-170.		27
150	Enzymatic hydrolysis of waste cellulose. Biotechnology and Bioengineering, 2010, 105, 1-25.	3.3	27
151	Profile of Secreted Hydrolases, Associated Proteins, and SlpA in Thermoanaerobacterium saccharolyticum during the Degradation of Hemicellulose. Applied and Environmental Microbiology, 2014, 80, 5001-5011.	3.1	27
152	Metabolome analysis reveals a role for glyceraldehyde 3-phosphate dehydrogenase in the inhibition of C. thermocellum by ethanol. Biotechnology for Biofuels, 2017, 10, 276.	6.2	27
153	Technoeconomic and life-cycle analysis of single-step catalytic conversion of wet ethanol into fungible fuel blendstocks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12576-12583.	7.1	27
154	Cross-national analysis of food security drivers: comparing results based on the Food Insecurity Experience Scale and Global Food Security Index. Food Security, 2021, 13, 1245-1261.	5.3	27
155	Kinetic modeling of xylan hydrolysis in co- and countercurrent liquid hot water flow-through pretreatments. Bioresource Technology, 2013, 130, 117-124.	9.6	26
156	Genetics, Genetic Manipulation, and Approaches to Strain Improvement of Filamentous Fungi. , 2014, , 318-329.		26
157	Organism development and characterization for ethanol production using thermophilic bacteria. Applied Biochemistry and Biotechnology, 1994, 45-46, 209-223.	2.9	25
158	Tracking the cellulolytic activity of Clostridium thermocellum biofilms. Biotechnology for Biofuels, 2013, 6, 175.	6.2	25
159	Both adhE and a Separate NADPH-Dependent Alcohol Dehydrogenase Gene, adhA , Are Necessary for High Ethanol Production in Thermoanaerobacterium saccharolyticum. Journal of Bacteriology, 2017, 199, .	2.2	25
160	Socio-environmental and land-use impacts of double-cropped maize ethanol in Brazil. Nature Sustainability, 2020, 3, 209-216.	23.7	25
161	Make Way for Ethanol. Science, 2010, 330, 1176-1176.	12.6	24
162	A global conversation about energy from biomass: the continental conventions of the global sustainable bioenergy project. Interface Focus, 2011, 1, 271-279.	3.0	24

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163	Genome-scale resources for Thermoanaerobacterium saccharolyticum. BMC Systems Biology, 2015, 9, 30.	3.0	24
164	Biosynthesis of radiolabeled cellodextrins by the Clostridium thermocellum cellobiose and cellodextrin phosphorylases for measurement of intracellular sugars. Applied Microbiology and Biotechnology, 2006, 70, 123-129.	3.6	23
165	Kinetic modeling of cellulosic biomass to ethanol via simultaneous saccharification and fermentation: Part II. Experimental validation using waste paper sludge and anticipation of CFD analysis. Biotechnology and Bioengineering, 2009, 102, 66-72.	3.3	23
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