Bruce E Dale

List of Publications by Year
in descending order

222 papers	25,990 citations	9786 73 h-index	6471 157 g-index
225 all docs	225 docs citations	225 times ranked	17146 citing authors

#	Article	IF	Citations
1	Features of promising technologies for pretreatment of lignocellulosic biomass. Bioresource Technology, 2005, 96, 673-686.	9.6	5,057
2	Global potential bioethanol production from wasted crops and crop residues. Biomass and Bioenergy, 2004, 26, 361-375.	5.7	1,584
3	Coordinated development of leading biomass pretreatment technologies. Bioresource Technology, 2005, 96, 1959-1966.	9.6	1,199
4	How biotech can transform biofuels. Nature Biotechnology, 2008, 26, 169-172.	17.5	984
5	Deconstruction of Lignocellulosic Biomass to Fuels and Chemicals. Annual Review of Chemical and Biomolecular Engineering, 2011, 2, 121-145.	6.8	804
6	Comparative sugar recovery data from laboratory scale application of leading pretreatment technologies to corn stover. Bioresource Technology, 2005, 96, 2026-2032.	9.6	470
7	Optimization of the ammonia fiber explosion (AFEX) treatment parameters for enzymatic hydrolysis of corn stover. Bioresource Technology, 2005, 96, 2014-2018.	9.6	468
8	Life cycle assessment of various cropping systems utilized for producing biofuels: Bioethanol and biodiesel. Biomass and Bioenergy, 2005, 29, 426-439.	5.7	458
9	Multi-scale visualization and characterization of lignocellulosic plant cell wall deconstruction during thermochemical pretreatment. Energy and Environmental Science, 2011, 4, 973.	30.8	437
10	â€˜Cradle-to-graveâ€™ assessment of existing lignocellulose pretreatment technologies. Current Opinion in Biotechnology, 2009, 20, 339-347.	6.6	436
11	Designer synthetic media for studying microbial-catalyzed biofuel production. Biotechnology for Biofuels, 2015, 8, 1.	6.2	418
12	Evaluation of ammonia fibre expansion (AFEX) pretreatment for enzymatic hydrolysis of switchgrass harvested in different seasons and locations. Biotechnology for Biofuels, 2010, 3, 1.	6.2	365
13	Understanding Factors that Limit Enzymatic Hydrolysis of Biomass: Characterization of Pretreated Corn Stover. Applied Biochemistry and Biotechnology, 2005, 124, 1081-1100.	2.9	356
14	Cellulosic ethanol production from AFEX-treated corn stover using <i>Saccharomyces cerevisiae</i> 424A(LNH-ST). Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1368-1373.	7.1	342
15	Effect of particle size based separation of milled corn stover on AFEX pretreatment and enzymatic digestibility. Biotechnology and Bioengineering, 2007, 96, 219-231.	3.3	333
16	Restructuring the Crystalline Cellulose Hydrogen Bond Network Enhances Its Depolymerization Rate. Journal of the American Chemical Society, 2011, 133, 11163-11174.	13.7	321
17	Pretreatment of Switchgrass by Ammonia Fiber Explosion (AFEX). Applied Biochemistry and Biotechnology, 2005, 124, 1133-1142.	2.9	315
18	Cellulosic biofuel contributions to a sustainable energy future: Choices and outcomes. Science, 2017, 356, .	12.6	314

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19	Process and technoeconomic analysis of leading pretreatment technologies for lignocellulosic ethanol production using switchgrass. Bioresource Technology, 2011, 102, 11105-11114.	9.6	274
20	Multifaceted characterization of cell wall decomposition products formed during ammonia fiber expansion (AFEX) and dilute acid based pretreatments. Bioresource Technology, 2010, 101, 8429-8438.	9.6	242
21	Biofuels, Land Use Change, and Greenhouse Gas Emissions: Some Unexplored Variables. Environmental Science & Technology, 2009, 43, 961-967.	10.0	235
22	Process optimization to convert forage and sweet sorghum bagasse to ethanol based on ammonia fiber expansion (AFEX) pretreatment. Bioresource Technology, 2010, 101, 1285-1292.	9.6	216
23	Influence of physico-chemical changes on enzymatic digestibility of ionic liquid and AFEX pretreated corn stover. Bioresource Technology, 2011, 102, 6928-6936.	9.6	203
24	A comparative study of ethanol production using dilute acid, ionic liquid and AFEXâ„¢ pretreated corn stover. Biotechnology for Biofuels, 2014, 7, 72.	6.2	199
25	Environmental aspects of ethanol derived from no-tilled corn grain: nonrenewable energy consumption and greenhouse gas emissions. Biomass and Bioenergy, 2005, 28, 475-489.	5.7	187
26	The ammonia freeze explosion (AFEX) process. Applied Biochemistry and Biotechnology, 1991, 28-29, 59-74.	2.9	186
27	Lignocellulosic Biomass Pretreatment Using AFEX. Methods in Molecular Biology, 2009, 581, 61-77.	0.9	180
28	Life cycle assessment of corn grain and corn stover in the United States. International Journal of Life Cycle Assessment, 2009, 14, 160-174.	4.7	179
29	Next-generation ammonia pretreatment enhances cellulosic biofuel production. Energy and Environmental Science, 2016, 9, 1215-1223.	30.8	169
30	Alkaliâ€based AFEX pretreatment for the conversion of sugarcane bagasse and cane leaf residues to ethanol. Biotechnology and Bioengineering, 2010, 107, 441-450.	3.3	168
31	Optimization of enzymatic hydrolysis and ethanol fermentation from AFEX-treated rice straw. Applied Microbiology and Biotechnology, 2009, 84, 667-676.	3.6	157
32	Allocation procedure in ethanol production system from corn grain i. system expansion. International Journal of Life Cycle Assessment, 2002, 7, 237.	4.7	151
33	Enzyme characterization for hydrolysis of AFEX and liquid hot-water pretreated distillersâ€™ grains and their conversion to ethanol. Bioresource Technology, 2008, 99, 5216-5225.	9.6	144
34	Optimization of Ammonia Fiber Expansion (AFEX) Pretreatment and Enzymatic Hydrolysis of<i>Miscanthus x giganteus</i>to Fermentable Sugars. Biotechnology Progress, 2007, 23, 846-850.	2.6	138
35	Effects of biomass particle size on steam explosion pretreatment performance for improving the enzyme digestibility of corn stover. Industrial Crops and Products, 2013, 44, 176-184.	5.2	133
36	Enzyme hydrolysis and ethanol fermentation of liquid hot water and AFEX pretreated distillersâ€™ grains at high-solids loadings. Bioresource Technology, 2008, 99, 5206-5215.	9.6	131

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37	Enzymatic digestibility and pretreatment degradation products of AFEXâ€treated hardwoods (<i>Populus nigra</i>). Biotechnology Progress, 2009, 25, 365-375.	2.6	127
38	Comparing the fermentation performance of Escherichia coli KO11, Saccharomyces cerevisiae 424A(LNH-ST) and Zymomonas mobilis AX101 for cellulosic ethanol production. Biotechnology for Biofuels, 2010, 3, 11.	6.2	124
39	?Greening? the chemical industry: research and development priorities for biobased industrial products. Journal of Chemical Technology and Biotechnology, 2003, 78, 1093-1103.	3.2	123
40	Highâ€throughput microplate technique for enzymatic hydrolysis of lignocellulosic biomass. Biotechnology and Bioengineering, 2008, 99, 1281-1294.	3.3	120
41	Take a Closer Look: Biofuels Can Support Environmental, Economic and Social Goals. Environmental Science & Technology, 2014, 48, 7200-7203.	10.0	120
42	The role of bioenergy in a climate-changing world. Environmental Development, 2017, 23, 57-64.	4.1	120
43	Systems biology-guided biodesign of consolidated lignin conversion. Green Chemistry, 2016, 18, 5536-5547.	9.0	119
44	Lignin Conversion to Low-Molecular-Weight Aromatics via an Aerobic Oxidation-Hydrolysis Sequence: Comparison of Different Lignin Sources. ACS Sustainable Chemistry and Engineering, 2018, 6, 3367-3374.	6.7	118
45	Comparative material balances around pretreatment technologies for the conversion of switchgrass to soluble sugars. Bioresource Technology, 2011, 102, 11063-11071.	9.6	117
46	Life Cycle Assessment Study of Biopolymers (Polyhydroxyalkanoates) - Derived from No-Tilled Corn (11) Tj ETQq0 0 0 rgBT /Overlock 10	4.7	116
47	Enhanced conversion of plant biomass into glucose using transgenic rice-produced endoglucanase for cellulosic ethanol. Transgenic Research, 2007, 16, 739-749.	2.4	112
48	Advanced Regional Biomass Processing Depots: a key to the logistical challenges of the cellulosic biofuel industry. Biofuels, Bioproducts and Biorefining, 2011, 5, 621-630.	3.7	110
49	Two-step SSCF to convert AFEX-treated switchgrass to ethanol using commercial enzymes and Saccharomyces cerevisiae 424A(LNH-ST). Bioresource Technology, 2010, 101, 8171-8178.	9.6	106
50	Cumulative Energy and Global Warming Impact from the Production of Biomass for Biobased Products. Journal of Industrial Ecology, 2003, 7, 147-162.	5.5	104
51	Ammonia Fiber Explosion Treatment of Corn Stover. Applied Biochemistry and Biotechnology, 2004, 115, 0951-0964.	2.9	103
52	Indirect land use change for biofuels: Testing predictions and improving analytical methodologies. Biomass and Bioenergy, 2011, 35, 3235-3240.	5.7	98
53	Predicting Digestibility of Ammonia Fiber Explosion (AFEX)-Treated Rice Straw. Applied Biochemistry and Biotechnology, 2002, 98-100, 23-36.	2.9	96
54	Consolidated bioprocessing (CBP) performance of <i>Clostridium phytofermentans</i> on AFEXâ€treated corn stover for ethanol production. Biotechnology and Bioengineering, 2011, 108, 1290-1297.	3.3	96

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55	Effects of changes in chemical and structural characteristic of ammonia fibre expansion (AFEX) pretreated oil palm empty fruit bunch fibre on enzymatic saccharification and fermentability for biohydrogen. Bioresource Technology, 2016, 211, 200-208.	9.6	95
56	Life cycle assessment of fuel ethanol derived from corn grain via dry milling. Bioresource Technology, 2008, 99, 5250-5260.	9.6	93
57	Biofuels Done Right: Land Efficient Animal Feeds Enable Large Environmental and Energy Benefits. Environmental Science & Technology, 2010, 44, 8385-8389.	10.0	93
58	Comparative study on enzymatic digestibility of switchgrass varieties and harvests processed by leading pretreatment technologies. Bioresource Technology, 2011, 102, 11089-11096.	9.6	93
59	Ethanolic fermentation of hydrolysates from ammonia fiber expansion (AFEX) treated corn stover and distillers grain without detoxification and external nutrient supplementation. Biotechnology and Bioengineering, 2008, 99, 529-539.	3.3	92
60	Engineering and Two-Stage Evolution of a Lignocellulosic Hydrolysate-Tolerant Saccharomyces cerevisiae Strain for Anaerobic Fermentation of Xylose from AFEX Pretreated Corn Stover. PLoS ONE, 2014, 9, e107499.	2.5	91
61	Protein feeds coproduction in biomass conversion to fuels and chemicals. Biofuels, Bioproducts and Biorefining, 2009, 3, 219-230.	3.7	90
62	A novel integrated biological process for cellulosic ethanol production featuring high ethanol productivity, enzyme recycling and yeast cells reuse. Energy and Environmental Science, 2012, 5, 7168.	30.8	90
63	Lignin triggers irreversible cellulase loss during pretreated lignocellulosic biomass saccharification. Biotechnology for Biofuels, 2014, 7, 175.	6.2	90
64	Comparing alternative cellulosic biomass biorefining systems: Centralized versus distributed processing systems. Biomass and Bioenergy, 2015, 74, 135-147.	5.7	89
65	Mushroom spent straw: a potential substrate for an ethanol-based biorefinery. Journal of Industrial Microbiology and Biotechnology, 2008, 35, 293-301.	3.0	88
66	Effects of Nitrogen Fertilizer Application on Greenhouse Gas Emissions and Economics of Corn Production. Environmental Science & Technology, 2008, 42, 6028-6033.	10.0	84
67	Energy and Greenhouse Gas Profiles of Polyhydroxybutyrates Derived from Corn Grain: A Life Cycle Perspective. Environmental Science & Technology, 2008, 42, 7690-7695.	10.0	84
68	An integrated paradigm for cellulosic biorefineries: utilization of lignocellulosic biomass as self-sufficient feedstocks for fuel, food precursors and saccharolytic enzyme production. Energy and Environmental Science, 2012, 5, 7100.	30.8	83
69	Comparison of enzymatic reactivity of corn stover solids prepared by dilute acid, AFEXâ„¢, and ionic liquid pretreatments. Biotechnology for Biofuels, 2014, 7, 71.	6.2	81
70	Ethanol Fuels: E10 or E85 â€“ Life Cycle Perspectives (5 pp). International Journal of Life Cycle Assessment, 2006, 11, 117-121.	4.7	78
71	Evaluation of storage methods for the conversion of corn stover biomass to sugars based on steam explosion pretreatment. Bioresource Technology, 2013, 132, 5-15.	9.6	78
72	Seeking to Understand the Reasons for Different Energy Return on Investment (EROI) Estimates for Biofuels. Sustainability, 2011, 3, 2413-2432.	3.2	77

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73	Optimum fiber spacing in a hollow fiber bioreactor. Biotechnology and Bioengineering, 1988, 32, 983-992.	3.3	74
74	Evaluation of agave bagasse recalcitrance using AFEXâ„¢, autohydrolysis, and ionic liquid pretreatments. Bioresource Technology, 2016, 211, 216-223.	9.6	74
75	Sugar loss and enzyme inhibition due to oligosaccharide accumulation during high solids-loading enzymatic hydrolysis. Biotechnology for Biofuels, 2015, 8, 195.	6.2	73
76	Enzymatic hydrolysis and recrystallization behavior of initially amorphous cellulose. Biotechnology and Bioengineering, 1985, 27, 177-181.	3.3	72
77	Enzymes for pharmaceutical applicationsâ€"a cradle-to-gate life cycle assessment. International Journal of Life Cycle Assessment, 2009, 14, 392-400.	4.7	72
78	Energy, wealth, and human development: Why and how biomass pretreatment research must improve. Biotechnology Progress, 2012, 28, 893-898.	2.6	72
79	Determination of cellulose accessibility by differential scanning calorimetry. Journal of Applied Polymer Science, 1986, 32, 4241-4253.	2.6	71
80	Transforming biorefinery designs with â€˜Plug-In Processes of Ligninâ€™ to enable economic waste valorization. Nature Communications, 2021, 12, 3912.	12.8	71
81	Life Cycle Inventory Information of the United States Electricity System (11/17 pp). International Journal of Life Cycle Assessment, 2005, 10, 294-304.	4.7	69
82	Heterologous Acidothermus cellulolyticus 1,4-Î²-endoglucanase E1 produced within the corn biomass converts corn stover into glucose. Applied Biochemistry and Biotechnology, 2007, 137-140, 207-219.	2.9	69
83	Performance of AFEXâ„¢ pretreated rice straw as source of fermentable sugars: the influence of particle size. Biotechnology for Biofuels, 2013, 6, 40.	6.2	69
84	A stirred bath technique for diffusivity measurements in cell matrices. Biotechnology and Bioengineering, 1988, 32, 1029-1036.	3.3	68
85	Isolation and characterization of new lignin streams derived from extractive-ammonia (EA) pretreatment. Green Chemistry, 2016, 18, 4205-4215.	9.0	68
86	Toward lower cost cellulosic biofuel production using ammonia based pretreatment technologies. Green Chemistry, 2016, 18, 957-966.	9.0	68
87	Ammonia Fiber Expansion (AFEX) Pretreatment, Enzymatic Hydrolysis, and Fermentation on Empty Palm Fruit Bunch Fiber (EPFBF) for Cellulosic Ethanol Production. Applied Biochemistry and Biotechnology, 2010, 162, 1847-1857.	2.9	65
88	Thinking clearly about biofuels: ending the irrelevant â€˜net energyâ€™ debate and developing better performance metrics for alternative fuels. Biofuels, Bioproducts and Biorefining, 2007, 1, 14-17.	3.7	62
89	Enzymatic hydrolysis of pelletized AFEXâ„¢â€treated corn stover at high solid loadings. Biotechnology and Bioengineering, 2014, 111, 264-271.	3.3	60
90	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

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91	Extrusion Processing for Ammonia Fiber Explosion (AFEX). Applied Biochemistry and Biotechnology, 1999, 77, 35-46.	2.9	57
92	Complex Physiology and Compound Stress Responses during Fermentation of Alkali-Pretreated Corn Stover Hydrolysate by an Escherichia coli Ethanologen. Applied and Environmental Microbiology, 2012, 78, 3442-3457.	3.1	57
93	Developing a model for assessing biomass processing technologies within a local biomass processing depot. Bioresource Technology, 2012, 106, 161-169.	9.6	57
94	Insights into plant cell wall structure, architecture, and integrity using glycome profiling of native and AFEX^{TM}-pre-treated biomass. Journal of Experimental Botany, 2015, 66, 4279-4294.	4.8	57
95	Anaerobic co-digestion of multiple agricultural residues to enhance biogas production in southern Italy. Waste Management, 2018, 78, 151-157.	7.4	57
96	Conversion of lignocellulosic agave residues into liquid biofuels using an AFEXâ„¢-based biorefinery. Biotechnology for Biofuels, 2018, 11, 7.	6.2	57
97	Enzymatic Hydrolysis of Distiller's Dry Grain and Solubles (DDGS) Using Ammonia Fiber Expansion Pretreatment. Energy & Fuels, 2006, 20, 2732-2736.	5.1	55
98	Extraction of Proteins from Switchgrass Using Aqueous Ammonia within an Integrated Biorefinery. Applied Biochemistry and Biotechnology, 2007, 143, 187-198.	2.9	55
99	Optimizing harvest of corn stover fractions based on overall sugar yields following ammonia fiber expansion pretreatment and enzymatic hydrolysis. Biotechnology for Biofuels, 2009, 2, 29.	6.2	55
100	Enzymatic Hydrolysis of Ammonia-Treated Sugar Beet Pulp. Applied Biochemistry and Biotechnology, 2001, 91-93, 269-282.	2.9	54
101	Biofuels: Thinking Clearly about the Issues. Journal of Agricultural and Food Chemistry, 2008, 56, 3885-3891.	5.2	53
102	Meeting global challenges with regenerative agriculture producing food and energy. Nature Sustainability, 2022, 5, 384-388.	23.7	53
103	In-house cellulase production from AFEXâ„¢ pretreated corn stover using Trichoderma reesei RUT C-30. RSC Advances, 2013, 3, 25960.	3.6	52
104	Greenhouse gas emissions of electricity and biomethane produced using the Biogasdoneringhtâ„¢ system: four case studies from Italy. Biofuels, Bioproducts and Biorefining, 2017, 11, 847-860.	3.7	52
105	Ammonia fiber expansion (AFEX) treatment of eleven different forages: Improvements to fiber digestibility in vitro. Animal Feed Science and Technology, 2010, 155, 147-155.	2.2	51
106	Economic comparison of multiple techniques for recovering leaf protein in biomass processing. Biotechnology and Bioengineering, 2011, 108, 530-537.	3.3	51
107	Ethanol production from AFEX pretreated corn fiber by recombinant bacteria. Biotechnology Letters, 1996, 18, 985-990.	2.2	50
108	All biomass is local: The cost, volume produced, and global warming impact of cellulosic biofuels depend strongly on logistics and local conditions. Biofuels, Bioproducts and Biorefining, 2015, 9, 422-434.	3.7	49

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109	Celluloseâ€"hemicellulose interactions at elevated temperatures increase cellulose recalcitrance to biological conversion. Green Chemistry, 2018, 20, 921-934.	9.0	49
110	Ethanol production potential from AFEXâ„¢ and steam-exploded sugarcane residues for sugarcane biorefineries. Biotechnology for Biofuels, 2018, 11, 127.	6.2	48
111	Phenotypic selection of a wild Saccharomyces cerevisiae strain for simultaneous saccharification and co-fermentation of AFEXâ„¢ pretreated corn stover. Biotechnology for Biofuels, 2013, 6, 108.	6.2	47
112	Incorporating anaerobic co-digestion of steam exploded or ammonia fiber expansion pretreated sugarcane residues with manure into a sugarcane-based bioenergy-livestock nexus. Bioresource Technology, 2019, 272, 326-336.	9.6	47
113	Biogasdonerightâ„¢: An innovative new system is commercialized in Italy. Biofuels, Bioproducts and Biorefining, 2016, 10, 341-345.	3.7	46
114	Comparative life cycle assessment of centralized and distributed biomass processing systems combined with mixed feedstock landscapes. GCB Bioenergy, 2011, 3, 427-438.	5.6	45
115	Toward high solids loading process for lignocellulosic biofuel production at a low cost. Biotechnology and Bioengineering, 2017, 114, 980-989.	3.3	44
116	Conversion of Extracted Oil Cake Fibers into Bioethanol Including DDGS, Canola, Sunflower, Sesame, Soy, and Peanut for Integrated Biodiesel Processing. JAOCS, Journal of the American Oil Chemists' Society, 2009, 86, 157-165.	1.9	43
117	Biomass refining: protein and ethanol from alfalfa. Industrial & Engineering Chemistry Product Research and Development, 1983, 22, 466-472.	0.5	42
118	Studying the rapid bioconversion of lignocellulosic sugars into ethanol using high cell density fermentations with cell recycle. Biotechnology for Biofuels, 2014, 7, 73.	6.2	41
119	Iteration of hybridoma growth and productivity in hollow fiber bioreactors using31P NMR. Magnetic Resonance in Medicine, 1991, 18, 181-192.	3.0	40
120	Optimization of AFEXâ„¢ pretreatment conditions and enzyme mixtures to maximize sugar release from upland and lowland switchgrass. Bioresource Technology, 2012, 104, 757-768.	9.6	40
121	Quantitatively understanding reduced xylose fermentation performance in AFEXTM treated corn stover hydrolysate using Saccharomyces cerevisiae 424A (LNH-ST) and Escherichia coli KO11. Bioresource Technology, 2012, 111, 294-300.	9.6	40
122	Controlling microbial contamination during hydrolysis of AFEX-pretreated corn stover and switchgrass: effects on hydrolysate composition, microbial response and fermentation. Biotechnology for Biofuels, 2015, 8, 180.	6.2	40
123	Role of Photodegradation in the Fate of Fluorescent Whitening Agents (FWAs) in Lacustrine Environments. Environmental Science & Technology, 2010, 44, 8791-8791.	10.0	39
124	Energy Requirements and Greenhouse Gas Emissions of Maize Production in the USA. Bioenergy Research, 2014, 7, 753-764.	3.9	39
125	Water-soluble phenolic compounds produced from extractive ammonia pretreatment exerted binary inhibitory effects on yeast fermentation using synthetic hydrolysate. PLoS ONE, 2018, 13, e0194012.	2.5	39
126	Continuous SSCF of AFEXâ„¢ pretreated corn stover for enhanced ethanol productivity using commercial enzymes and <i>Saccharomyces cerevisiae</i> 424A (LNHâ€ST). Biotechnology and Bioengineering, 2013, 110, 1302-1311.	3.3	37

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127	A sober view of the difficulties in scaling cellulosic biofuels. Biofuels, Bioproducts and Biorefining, 2017, 11, 5-7.	3.7	37
128	Understanding Factors that Limit Enzymatic Hydrolysis of Biomass. , 2005, , 1081-1099.		36
129	Strategy for Identification of Novel Fungal and Bacterial Glycosyl Hydrolase Hybrid Mixtures that can Efficiently Saccharify Pretreated Lignocellulosic Biomass. Bioenergy Research, 2010, 3, 67-81.	3.9	35
130	Sugarcane ethanol and beef cattle integration in Brazil. Biomass and Bioenergy, 2019, 120, 448-457.	5.7	34
131	Techno-economic comparison of centralized versus decentralized biorefineries for two alkaline pretreatment processes. Bioresource Technology, 2017, 226, 9-17.	9.6	33
132	Downregulation of Maize Cinnamoylâ€Coenzyme A Reductase via RNA Interference Technology Causes Brown Midrib and Improves Ammonia Fiber Expansionâ€Pretreated Conversion into Fermentable Sugars for Biofuels. Crop Science, 2012, 52, 2687-2701.	1.8	31
133	Low Temperature and Long Residence Time AFEX Pretreatment of Corn Stover. Bioenergy Research, 2012, 5, 372-379.	3.9	31
134	Mixing alkali pretreated and acid pretreated biomass for cellulosic ethanol production featuring reduced chemical use and decreased inhibitory effect. Industrial Crops and Products, 2018, 124, 719-725.	5.2	31
135	Potential for Electrified Vehicles to Contribute to U.S. Petroleum and Climate Goals and Implications for Advanced Biofuels. Environmental Science & Technology, 2015, 49, 8277-8286.	10.0	30
136	Time to Rethink Cellulosic Biofuels?. Biofuels, Bioproducts and Biorefining, 2018, 12, 5-7.	3.7	30
137	Lignocellulose conversion and the future of fermentation biotechnology. Trends in Biotechnology, 1987, 5, 287-291.	9.3	29
138	Integrating alkaline extraction of proteins with enzymatic hydrolysis of cellulose from wet distillerâ€™s grains and solubles. Bioresource Technology, 2009, 100, 5876-5883.	9.6	29
139	The quest for alternatives to microbial cellulase mix production: corn stover-produced heterologous multi-cellulases readily deconstruct lignocellulosic biomass into fermentable sugars. Journal of Chemical Technology and Biotechnology, 2011, 86, 633-641.	3.2	28
140	Sequential crops for food, energy, and economic development in rural areas: the case of Sicily. Biofuels, Bioproducts and Biorefining, 2018, 12, 22-28.	3.7	28
141	Comparative lipidomic profiling of xyloseâ€metabolizing <i>S. cerevisiae</i> and its parental strain in different media reveals correlations between membrane lipids and fermentation capacity. Biotechnology and Bioengineering, 2011, 108, 12-21.	3.3	27
142	Optimizing Ammonia Pressurization/Depressurization Processing Conditions to Enhance Enzymatic Susceptibility of Dwarf Elephant Grass. Applied Biochemistry and Biotechnology, 2000, 84-86, 163-180.	2.9	26
143	Microbial lipid production from AFEXâ„¢ pretreated corn stover. RSC Advances, 2015, 5, 28725-28734.	3.6	26
144	Carbon-Negative Biofuel Production. Environmental Science & Technology, 2020, 54, 10797-10807.	10.0	26

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145	Analyses of Bioreactor Performance by Nuclear Magnetic Resonance Spectroscopy. Nature Biotechnology, 1989, 7, 50-54.	17.5	25
146	Effect of primary degradationâ€“reaction products from Ammonia Fiber Expansion (AFEX)-treated corn stover on the growth and fermentation of Escherichia coli KO11. Bioresource Technology, 2010, 101, 7849-7855.	9.6	25
147	The watershedâ€scale optimized and rearranged landscape design (<scp>WORLD</scp>) model and local biomass processing depots for sustainable biofuel production: Integrated life cycle assessments. Biofuels, Bioproducts and Biorefining, 2013, 7, 537-550.	3.7	25
148	Design, implementation, and evaluation of sustainable bioenergy production systems. Biofuels, Bioproducts and Biorefining, 2014, 8, 487-503.	3.7	25
149	Scaling up and benchmarking of ethanol production from pelletized pilot scale AFEX treated corn stover using <i>Zymomonas mobilis</i> 8b. Biofuels, 2016, 7, 253-262.	2.4	25
150	A distributed cellulosic biorefinery system in the US Midwest based on corn stover. Biofuels, Bioproducts and Biorefining, 2016, 10, 819-832.	3.7	24
151	Kinetic characterization of baculovirus-induced cell death in insect cell cultures. Biotechnology and Bioengineering, 1993, 41, 104-110.	3.3	23
152	Improving the cornâ€ethanol industry: Studying protein separation techniques to obtain higher valueâ€added product options for distillers grains. Biotechnology and Bioengineering, 2008, 101, 49-61.	3.3	23
153	A New Industry Has Been Launched: The Cellulosic Biofuels Ship (Finally) Sails. Biofuels, Bioproducts and Biorefining, 2015, 9, 1-3.	3.7	23
154	Ammonia Fiber Expansion (AFEX) Pretreatment of Lignocellulosic Biomass. Journal of Visualized Experiments, 2020, , .	0.3	23
155	AFEX Pretreatment and Enzymatic Conversion of Black Locust (Robinia pseudoacacia L.) to Soluble Sugars. Bioenergy Research, 2012, 5, 306-318.	3.9	22
156	Guayule as a feedstock for lignocellulosic biorefineries using ammonia fiber expansion (AFEX) pretreatment. Industrial Crops and Products, 2012, 37, 486-492.	5.2	22
157	Integration in a depotâ€based decentralized biorefinery system: Corn stoverâ€based cellulosic biofuel. GCB Bioenergy, 2019, 11, 871-882.	5.6	22
158	Oxygen transfer properties of a bioreactor for use within a nuclear magnetic resonance spectrometer. Biotechnology and Bioengineering, 1988, 32, 966-974.	3.3	21
159	Using steam explosion or AFEXâ„¢ to produce animal feeds and biofuel feedstocks in a biorefinery based on sugarcane residues. Biofuels, Bioproducts and Biorefining, 2018, 12, 978-996.	3.7	21
160	Rapid quantification of major reaction products formed during thermochemical pretreatment of lignocellulosic biomass using GCâ€“MS. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 1018-1022.	2.3	20
161	Comprehensive characterization of non-cellulosic recalcitrant cell wall carbohydrates in unhydrolyzed solids from AFEX-pretreated corn stover. Biotechnology for Biofuels, 2017, 10, 82.	6.2	20
162	Effect of storage conditions on the stability and fermentability of enzymatic lignocellulosic hydrolysate. Bioresource Technology, 2013, 147, 212-220.	9.6	19

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163	Physical characteristics of AFEX-pretreated andÂdensified switchgrass, prairie cord grass, andÂcorn stover. Biomass and Bioenergy, 2015, 78, 164-174.	5.7	18
164	Feeding a sustainable chemical industry: do we have the bioproducts cart before the feedstocks horse?. Faraday Discussions, 2017, 202, 11-30.	3.2	18
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