

# James D Mcmillan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/68959/publications.pdf>

Version: 2024-02-01

56  
papers

4,950  
citations

159585

30  
h-index

197818

49  
g-index

57  
all docs

57  
docs citations

57  
times ranked

4629  
citing authors

#	ARTICLE	IF	CITATIONS
1	How biotech can transform biofuels. <i>Nature Biotechnology</i> , 2008, 26, 169-172.	17.5	984
2	Dilute-Sulfuric Acid Pretreatment of Corn Stover in Pilot-Scale Reactor: Investigation of Yields, Kinetics, and Enzymatic Digestibilities of Solids. <i>Applied Biochemistry and Biotechnology</i> , 2003, 105, 69-86.	2.9	378
3	Pretreatment of Lignocellulosic Biomass. <i>ACS Symposium Series</i> , 1994, , 292-324.	0.5	321
4	Availability of corn stover as a sustainable feedstock for bioethanol production. <i>Bioresource Technology</i> , 2003, 88, 17-25.	9.6	284
5	Soluble and insoluble solids contributions to high-solids enzymatic hydrolysis of lignocellulose. <i>Bioresource Technology</i> , 2008, 99, 8940-8948.	9.6	280
6	Development and Validation of a Kinetic Model for Enzymatic Saccharification of Lignocellulosic Biomass. <i>Biotechnology Progress</i> , 2004, 20, 698-705.	2.6	238
7	Model-Based Fed-Batch for High-Solids Enzymatic Cellulose Hydrolysis. <i>Applied Biochemistry and Biotechnology</i> , 2009, 152, 88-107.	2.9	196
8	Comparative study of corn stover pretreated by dilute acid and cellulose solvent-based lignocellulose fractionation: Enzymatic hydrolysis, supramolecular structure, and substrate accessibility. <i>Biotechnology and Bioengineering</i> , 2009, 103, 715-724.	3.3	191
9	Rheology of corn stover slurries at high solids concentrations – Effects of saccharification and particle size. <i>Bioresource Technology</i> , 2009, 100, 925-934.	9.6	174
10	Bioethanol production: Status and prospects. <i>Renewable Energy</i> , 1997, 10, 295-302.	8.9	156
11	Potential synergies of drop-in biofuel production with further co-processing at oil refineries. <i>Biofuels, Bioproducts and Biorefining</i> , 2019, 13, 760-775.	3.7	128
12	Identification of inhibitory components toxic toward <i>Zymomonas mobilis</i> CP4(pZB5) xylose fermentation. <i>Applied Biochemistry and Biotechnology</i> , 1997, 67, 185-198.	2.9	119
13	The effect of overliming on the toxicity of dilute acid pretreated lignocellulosics: the role of inorganics, uronic acids and ether-soluble organics. <i>Enzyme and Microbial Technology</i> , 2000, 27, 240-247.	3.2	103
14	Biofuels policies that have encouraged their production and use: An international perspective. <i>Energy Policy</i> , 2020, 147, 111906.	8.8	101
15	A perspective on renewable bioenergy from photosynthetic algae as feedstock for biofuels and bioproducts. <i>Algal Research</i> , 2017, 24, 261-264.	4.6	87
16	Conversion of Hemicellulose Hydrolyzates to Ethanol. <i>ACS Symposium Series</i> , 1994, , 411-437.	0.5	81
17	Simultaneous Saccharification and Cofermentation of Dilute-Acid Pretreated Yellow Poplar Hardwood to Ethanol Using Xylose-Fermenting <i>Zymomonas mobilis</i> . <i>Applied Biochemistry and Biotechnology</i> , 1999, 79, 649-666.	2.9	75
18	Arabinose utilization by xylose-fermenting yeasts and fungi. <i>Applied Biochemistry and Biotechnology</i> , 1994, 45-46, 569-584.	2.9	71

#	ARTICLE	IF	CITATIONS
19	Drop in biofuel production via conventional (lipid/fatty acid) and advanced (biomass) routes. Part I. Biofuels, Bioproducts and Biorefining, 2017, 11, 344-362.	3.7	69
20	Advanced Bioethanol Production Technologies: A Perspective. ACS Symposium Series, 1997, , 2-45.	0.5	65
21	Comparative performance of precommercial cellulases hydrolyzing pretreated corn stover. Biotechnology for Biofuels, 2011, 4, 29.	6.2	63
22	Calculating sugar yields in high solids hydrolysis of biomass. Bioresource Technology, 2011, 102, 2897-2903.	9.6	63
23	Enhanced Oxygen Transfer Using Oil-in-Water Dispersions. Annals of the New York Academy of Sciences, 1987, 506, 569-582.	3.8	51
24	Evaluation of PTMSP membranes in achieving enhanced ethanol removal from fermentations by pervaporation. Applied Biochemistry and Biotechnology, 1997, 63-65, 469-482.	2.9	45
25	Adsorptive membranes vs. resins for acetic acid removal from biomass hydrolysates. Desalination, 2006, 193, 361-366.	8.2	45
26	Kinetic modeling to optimize pentose fermentation in <i>Zymomonas mobilis</i> . Biotechnology and Bioengineering, 2006, 94, 273-295.	3.3	45
27	Dilute-Sulfuric Acid Pretreatment of Corn Stover in Pilot-Scale Reactor. , 2003, , 69-85.		45
28	Mathematical modeling and optimization of cellulase protein production using <i>Trichoderma reesei</i> RL-P37. , 1999, 66, 1-16.		44
29	Mechanisms of Oxygen Transfer Enhancement during Submerged Cultivation in Perfluorochemical-in-Water Dispersions. Annals of the New York Academy of Sciences, 1990, 589, 283-300.	3.8	39
30	Fermentation Performance Characteristics of a Prehydrolyzate-Adapted Xylose-Fermenting Recombinant <i>Zymomonas</i> in Batch and Continuous Fermentations. Applied Biochemistry and Biotechnology, 1999, 77, 191-204.	2.9	39
31	Optimization of seed production for a simultaneous saccharification cofermentation biomass-to-ethanol process using recombinant <i>Zymomonas</i> . Applied Biochemistry and Biotechnology, 1997, 63-65, 269-286.	2.9	35
32	Continuous culture studies of xylose-fermenting <i>Zymomonas mobilis</i> . Applied Biochemistry and Biotechnology, 1998, 70-72, 353-367.	2.9	33
33	Recovery of Fuel-Precursor Lipids from Oleaginous Yeast. ACS Sustainable Chemistry and Engineering, 2018, 6, 2921-2931.	6.7	29
34	Methodological analysis for determination of enzymatic digestibility of cellulosic materials. Biotechnology and Bioengineering, 2007, 96, 188-194.	3.3	27
35	Characterization of Heterologous and Native Enzyme Activity Profiles in Metabolically Engineered <i>Zymomonas mobilis</i> Strains During Batch Fermentation of Glucose and Xylose Mixtures. Applied Biochemistry and Biotechnology, 2002, 98-100, 341-356.	2.9	26
36	Influence Of Operating Conditions and Vessel Size On Oxygen Transfer During Cellulase Production. Applied Biochemistry and Biotechnology, 2001, 91-93, 627-642.	2.9	22

#	ARTICLE	IF	CITATIONS
37	Improvements in Titer, Productivity, and Yield Using Solka-Floc for Cellulase Production. Applied Biochemistry and Biotechnology, 2000, 84-86, 859-874.	2.9	20
38	Effects of dilute-acid pretreatment conditions on filtration performance of corn stover hydrolyzate. Bioresource Technology, 2017, 243, 474-480.	9.6	18
39	Enzyme Production, Growth, and Adaptation of <i>T. reesei</i> Strains QM9414, L-27, RL-P37, and Rut C-30 to Conditioned Yellow Poplar Sawdust Hydrolysate (Scientific Note). Applied Biochemistry and Biotechnology, 1999, 77, 293-310.	2.9	17
40	Continuous Fermentation Studies with Xylose-Utilizing Recombinant <i>Zymomonas mobilis</i> . Applied Biochemistry and Biotechnology, 2000, 84-86, 295-310.	2.9	17
41	Measurement and Analysis of Intracellular ATP Levels in Metabolically Engineered <i>Zymomonas mobilis</i> Fermenting Glucose and Xylose Mixtures. Biotechnology Progress, 2006, 22, 359-368.	2.6	16
42	Catalyst Transport in Corn Stover Internodes Elucidating Transport Mechanisms Using Direct Blue-I. Applied Biochemistry and Biotechnology, 2006, 130, 509-527.	2.9	16
43	Assessing pretreatment reactor scaling through empirical analysis. Biotechnology for Biofuels, 2016, 9, 213.	6.2	16
44	High-yield shake-flask fermentation of xylose to ethanol. Applied Biochemistry and Biotechnology, 1994, 45-46, 509-514.	2.9	15
45	Thinking big: towards ideal strains and processes for large-scale aerobic biofuels production. Microbial Biotechnology, 2017, 10, 40-42.	4.2	15
46	Carbon Mass Balance Evaluation of Cellulase Production on Soluble and Insoluble Substrates. Biotechnology Progress, 2002, 18, 1400-1407.	2.6	13
47	Interpolated parameter functions for neural network models. Computers and Chemical Engineering, 2000, 24, 2545-2553.	3.8	12
48	Use of Measurement Uncertainty Analysis to Assess Accuracy of Carbon Mass Balance Closure for a Cellulase Production Process. Applied Biochemistry and Biotechnology, 2002, 98-100, 509-524.	2.9	7
49	Catalyst Transport in Corn Stover Internodes. , 2006, , 509-527.		3
50	Assessing the Protein Concentration in Commercial Enzyme Preparations. Methods in Molecular Biology, 2012, 908, 169-180.	0.9	2
51	Introduction to the Proceedings of the Twenty-Seventh Symposium on Biotechnology for Fuels and Chemicals. Applied Biochemistry and Biotechnology, 1996, 131, iii-viii.	2.9	1
52	Introduction to the Proceedings of the Twenty-Seventh Symposium on Biotechnology for Fuels and Chemicals. Applied Biochemistry and Biotechnology, 2006, 130, iii-viii.	2.9	1
53	Control of High-Solids Saccharification using a Model-Based Methodology for Fed-Batch Operation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 177-182.	0.4	0
54	Introduction to the Proceedings of the Twenty-Seventh Symposium on Biotechnology for Fuels and Chemicals. Applied Biochemistry and Biotechnology, 1996, 131, iii-viii.	2.9	0

#	ARTICLE	IF	CITATIONS
55	Introduction to the proceedings of the twenty-seventh symposium on biotechnology for fuels and chemicals. Applied Biochemistry and Biotechnology, 2006, 132, iii-viii.	2.9	0
56	Introduction to the Proceedings of the Twenty-Seventh Symposium on Biotechnology for Fuels and Chemicals. Applied Biochemistry and Biotechnology, 2006, 129, iii-viii.	2.9	0