P J Weimer

List of Publications by Year
in descending order

53 papers	4,266 citations	101496 36 h-index	168321 53 g-index
54 all docs	54 docs citations	54 times ranked	3160 citing authors

#	Article	IF	Citations
1	Fermentation of cellulose and cellobiose by Clostridium thermocellum in the absence of Methanobacterium thermoautotrophicum. Applied and Environmental Microbiology, 1977, 33, 289-297.	1.4	365
2	Cellulolytic and physiological properties of Clostridium thermocellum. Archives of Microbiology, 1977, 114, 1-7.	1.0	286
3	Host specificity of the ruminal bacterial community in the dairy cow following near-total exchange of ruminal contents. Journal of Dairy Science, 2010, 93, 5902-5912.	1.4	235
4	Comparative study of SPORL and dilute-acid pretreatments of spruce for cellulosic ethanol production. Bioresource Technology, 2010, 101, 3106-3114.	4.8	234
5	One carbon metabolism in methanogenic bacteria. Archives of Microbiology, 1978, 119, 49-57.	1.0	169
6	Acetate metabolism inMethanosarcina barkeri. Archives of Microbiology, 1978, 119, 175-182.	1.0	151
7	Why Donâ€™t Ruminal Bacteria Digest Cellulose Faster?. Journal of Dairy Science, 1996, 79, 1496-1502.	1.4	148
8	Effect of cellulose fine structure on kinetics of its digestion by mixed ruminal microorganisms in vitro. Applied and Environmental Microbiology, 1990, 56, 2421-2429.	1.4	144
9	Effect of Diet on Populations of Three Species of Ruminal Cellulolytic Bacteria in Lactating Dairy Cows. Journal of Dairy Science, 1999, 82, 122-134.	1.4	130
10	Manipulating ruminal fermentation: a microbial ecological perspective.. Journal of Animal Science, 1998, 76, 3114.	0.2	128
11	Isolation and characterization of a new, methylotrophic, acidogenic anaerobe, the marburg strain. Current Microbiology, 1980, 3, 381-386.	1.0	120
12	Production of caproic acid by cocultures of ruminal cellulolytic bacteria and Clostridium kluyveri grown on cellulose and ethanol. Applied Microbiology and Biotechnology, 1995, 44, 507-513.	1.7	113
13	Initial pH as a Determinant of Cellulose Digestion Rate by Mixed Ruminal Microorganisms In Vitro. Journal of Dairy Science, 2001, 84, 848-859.	1.4	107
14	The survival of silage inoculant lactic acid bacteria in rumen fluid. Journal of Applied Microbiology, 2003, 94, 1066-1071.	1.4	99
15	Effect of Phosphate on the Corrosion of Carbon Steel and on the Composition of Corrosion Products in Two-Stage Continuous Cultures of <i>Desulfovibrio desulfuricans</i>. Applied and Environmental Microbiology, 1988, 54, 386-396.	1.4	93
16	Shifts in bacterial community composition in the rumen of lactating dairy cows under milk fat-depressing conditions. Journal of Dairy Science, 2010, 93, 265-278.	1.4	91
17	Quantitative analysis of growth and volatile fatty acid production by the anaerobic ruminal bacterium Megasphaera elsdenii T81. Applied Microbiology and Biotechnology, 2013, 97, 4075-4081.	1.7	89
18	Bacterial methanogenesis: Acetate as a methane precursor in pure culture. Archives of Microbiology, 1975, 104, 129-134.	1.0	87

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19	Degradation characteristics of isolated andin situ cell wall lucerne pectic polysaccharides by mixed ruminal microbes. Journal of the Science of Food and Agriculture, 1995, 69, 185-196.	1.7	84
20	pH dynamics and bacterial community composition in the rumen of lactating dairy cows. Journal of Dairy Science, 2010, 93, 279-287.	1.4	81
21	Acetate assimilation pathway of Methanosarcina barkeri. Journal of Bacteriology, 1979, 137, 332-339.	1.0	80
22	Effects of dilution rate and pH on the ruminal cellulolytic bacterium Fibrobacter succinogenes S85 in cellulose-fed continuous culture. Archives of Microbiology, 1993, 160, 288-294.	1.0	79
23	Response surface analysis of the effects of pH and dilution rate on Ruminococcus flavefaciens FD-1 in cellulose-fed continuous culture. Applied and Environmental Microbiology, 1992, 58, 2583-2591.	1.4	74
24	Cellodextrin efflux by the cellulolytic ruminal bacterium Fibrobacter succinogenes and its potential role in the growth of nonadherent bacteria. Applied and Environmental Microbiology, 1995, 61, 1757-1762.	1.4	70
25	Relationship between the fine structure of native cellulose and cellulose degradability by the cellulase complexes ofTrichoderma reesei andClostridium thermocellum. Biotechnology and Bioengineering, 1985, 27, 1540-1547.	1.7	66
26	Characterization, Genetic Variation, and Combining Ability of Maize Traits Relevant to the Production of Cellulosic Ethanol. Crop Science, 2009, 49, 85-98.	0.8	66
27	Differential Fermentation of Cellulose Allomorphs by Ruminal Cellulolytic Bacteria. Applied and Environmental Microbiology, 1991, 57, 3101-3106.	1.4	65
28	In vitro gas production as a surrogate measure of the fermentability of cellulosic biomass to ethanol. Applied Microbiology and Biotechnology, 2005, 67, 52-58.	1.7	60
29	Effects of chemical treatments and heating on the crystallinity of celluloses and their implications for evaluating the effect of crystallinity on cellulose biodegradation. Biotechnology and Bioengineering, 1995, 48, 169-178.	1.7	59
30	Thermophilic anaerobic bacteria which ferment hemicellulose: characterization of organisms and identification of plasmids. Archives of Microbiology, 1984, 138, 31-36.	1.0	51
31	Competition for cellulose among three predominant ruminal cellulolytic bacteria under substrate-excess and substrate-limited conditions. Applied and Environmental Microbiology, 1997, 63, 734-742.	1.4	50
32	Single-Pass Harvest of Corn Grain and Stover: Performance of Three Harvester Configurations. Transactions of the ASABE, 2009, 52, 51-60.	1.1	49
33	Symposium review: Hostâ€"rumen microbe interactions may be leveraged to improve the productivity of dairy cows. Journal of Dairy Science, 2018, 101, 7680-7689.	1.4	48
34	Individual animal variability in ruminal bacterial communities and ruminal acidosis in primiparous Holstein cows during the peripartурient period. Journal of Dairy Science, 2012, 95, 6716-6730.	1.4	45
35	Fermentability of eastern gamagrass, big bluestem and sand bluestem grown across a wide variety of environments. Bioresource Technology, 2007, 98, 1615-1621.	4.8	44
36	Utilization of individual cellodextrins by three predominant ruminal cellulolytic bacteria. Applied and Environmental Microbiology, 1996, 62, 1084-1088.	1.4	40

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37	Sucrose concentration alters fermentation kinetics, products, and carbon fates during in vitro fermentation with mixed ruminal microbes1. Journal of Animal Science, 2007, 85, 1467-1478.	0.2	39
38	Production of caproic acid by cocultures of ruminal cellulolytic bacteria and Clostridium kluyveri grown on cellulose and ethanol. Applied Microbiology and Biotechnology, 1995, 44, 507-513.	1.7	35
39	Changes in ruminal bacterial community composition following feeding of alfalfa ensiled with a lactic acid bacterial inoculant. Journal of Dairy Science, 2012, 95, 328-339.	1.4	31
40	Fermentation of a Bacterial Cellulose/Xylan Composite by Mixed Ruminal Microflora:Â Implications for the Role of Polysaccharide Matrix Interactions in Plant Cell Wall Biodegradability. Journal of Agricultural and Food Chemistry, 2000, 48, 1727-1733.	2.4	30
41	Effects of ruminal dosing of Holstein cows with Megasphaera elsdenii on milk fat production, ruminal chemistry, and bacterial strain persistence. Journal of Dairy Science, 2015, 98, 8078-8092.	1.4	29
42	Thermophilic anaerobic fermentation of hemicellulose and hemicellulose-derived aldose sugars by Thermoanaerobacter strain B6A. Archives of Microbiology, 1985, 143, 130-136.	1.0	27
43	Inhibition of ruminal cellulose fermentation by extracts of the perennial legume cicer milkvetch (Astragalus cicer). Applied and Environmental Microbiology, 1993, 59, 405-409.	1.4	26
44	Fermentation of alfalfa wet-fractionation liquids to volatile fatty acids by Streptococcus bovis and Megasphaera elsdenii. Bioresource Technology, 2013, 142, 88-94.	4.8	25
45	Solid residues from Ruminococcus cellulose fermentations as components of wood adhesive formulations. Applied Microbiology and Biotechnology, 2003, 63, 29-34.	1.7	23
46	Divergent utilization patterns of grass fructan, inulin, and other nonfiber carbohydrates by ruminal microbes. Journal of Dairy Science, 2016, 99, 245-257.	1.4	22
47	Fermentation of 6-Deoxyhexoses by Bacillus macerans. Applied and Environmental Microbiology, 1984, 47, 263-267.	1.4	22
48	Wood adhesives prepared from lucerne fiber fermentation residues of Ruminococcus albus and Clostridium thermocellum. Applied Microbiology and Biotechnology, 2005, 66, 635-640.	1.7	21
49	Competition for cellobiose among three predominant ruminal cellulolytic bacteria under substrate-excess and substrate-limited conditions. Applied and Environmental Microbiology, 1997, 63, 743-748.	1.4	16
50	In vitro ruminal fermentation of treated alfalfa silage using ruminal inocula from high and low feed-efficient lactating cows. Journal of Applied Microbiology, 2016, 121, 333-340.	1.4	9
51	Anaerobic Fermentation of Woody Biomass Pretreated with Supercritical Ammonia. Applied and Environmental Microbiology, 1986, 52, 733-736.	1.4	7
52	Method for measuring gas production kinetics. BSAP Occasional Publication, 1998, 22, 209-211.	0.0	3
53	Automated screening of inhibitors of bacterial dissimilatory sulfate reduction. Applied Microbiology and Biotechnology, 1991, 35, 297-300.	1.7	1