

Karen A Beauchemin

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4823081/karen-a-beauchemin-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

99
papers

2,200
citations

25
h-index

43
g-index

111
ext. papers

2,993
ext. citations

2.6
avg, IF

6.17
L-index

#	Paper	IF	Citations
99	Increased Nitrogen Retention and Reduced Methane Emissions of Beef Cattle Grazing Legume vs. Grass Irrigated Pastures in the Mountain West USA. <i>Agronomy</i> , 2022 , 12, 304	3.6	0
98	Control of Methanogenesis in Dairy Animals 2022 , 65-78		0
97	The Effect of Manure from Cattle Fed Barley- vs. Corn-Based Diets on Greenhouse Gas Emissions Depends on Soil Type. <i>Soil Systems</i> , 2022 , 6, 47	3.5	
96	PSX-B-10 Effect of undigested neutral detergent fiber concentration and forage inclusion rate on ruminal pH, reticular motility, and total tract permeability for finishing beef heifers. <i>Journal of Animal Science</i> , 2021 , 99, 457-458	0.7	0
95	PSVIII-17 Effect of high-tannin sorghum grain on in vitro rumen fermentation and methane production. <i>Journal of Animal Science</i> , 2021 , 99, 427-428	0.7	78
94	330 3-nitrooxypropanol Supplementation of a Forage Diet Decreased Enteric Methane Emissions from Beef Cattle Without Affecting Apparent Total-tract Digestibility. <i>Journal of Animal Science</i> , 2021 , 99, 186-187	0.7	0
93	PSXIV-11 Silage source, physically effective neutral detergent fiber, and undigested neutral detergent fiber concentrations affect eating behavior, ruminal pH and reticular motility of finishing heifers. <i>Journal of Animal Science</i> , 2021 , 99, 476-477	0.7	0
92	Combined effects of 3-nitrooxypropanol and canola oil supplementation on methane emissions, rumen fermentation and biohydrogenation, and total tract digestibility in beef cattle. <i>Journal of Animal Science</i> , 2021 , 99,	0.7	6
91	Effect of Harvesting Corn after Frost in Alberta (Canada) on Whole-Plant Yield, Nutritive Value, and Kernel Properties. <i>Agronomy</i> , 2021 , 11, 459	3.6	0
90	68 Utility of 3-NOP in Beef Production Systems. <i>Journal of Animal Science</i> , 2021 , 99, 132-133	0.7	78
89	Effect of non-encapsulated and encapsulated active dried yeast on blood cell count, blood metabolites, and immune response of finishing beef heifers. <i>Canadian Journal of Animal Science</i> , 2021 , 101, 390-394	0.9	
88	Use of 3-nitrooxypropanol in a commercial feedlot to decrease enteric methane emissions from cattle fed a corn-based finishing diet. <i>Journal of Animal Science</i> , 2021 , 99,	0.7	4
87	Effect of silage source, physically effective neutral detergent fiber, and undigested neutral detergent fiber concentrations on performance and carcass characteristics of finishing steers. <i>Translational Animal Science</i> , 2021 , 5, txaa236	1.4	4
86	3-Nitrooxypropanol Decreased Enteric Methane Production From Growing Beef Cattle in a Commercial Feedlot: Implications for Sustainable Beef Cattle Production. <i>Frontiers in Animal Science</i> , 2021 , 2,		3
85	In Vitro Assessment of Enteric Methane Emission Potential of Whole-Plant Barley, Oat, Triticale and Wheat. <i>Animals</i> , 2021 , 11,	3.1	2
84	Effect of Manure from Cattle Fed 3-Nitrooxypropanol on Anthropogenic Greenhouse Gas Emissions Depends on Soil Type. <i>Agronomy</i> , 2021 , 11, 371	3.6	2
83	Climate change impacts on corn heat unit for the Canadian Prairie provinces. <i>Agronomy Journal</i> , 2021 , 113, 1852-1864	2.2	3

82	A Review of 3-Nitrooxypropanol for Enteric Methane Mitigation from Ruminant Livestock.. <i>Animals</i> , 2021 , 11,	3.1	2
81	Effect of ammonia fiber expansion-treated wheat straw and a recombinant fibrolytic enzyme on rumen microbiota and fermentation parameters, total tract digestibility, and performance of lambs. <i>Journal of Animal Science</i> , 2020 , 98,	0.7	8
80	Optimum roughage proportion in barley-based feedlot cattle diets: total tract nutrient digestibility, rumination, ruminal acidosis, short-chain fatty absorption, and gastrointestinal tract barrier function. <i>Journal of Animal Science</i> , 2020 , 98,	0.7	5
79	Liquid hot water treatment of rice straw enhances anaerobic degradation and inhibits methane production during in vitro ruminal fermentation. <i>Journal of Dairy Science</i> , 2020 , 103, 4252-4261	4	8
78	Feeding diets varying in forage proportion and particle length to lactating dairy cows: I. Effects on ruminal pH and fermentation, microbial protein synthesis, digestibility, and milk production. <i>Journal of Dairy Science</i> , 2020 , 103, 4340-4354	4	10
77	Review: Fifty years of research on rumen methanogenesis: lessons learned and future challenges for mitigation. <i>Animal</i> , 2020 , 14, s2-s16	3.1	93
76	Beef cattle production impacts soil organic carbon storage. <i>Science of the Total Environment</i> , 2020 , 718, 137273	10.2	9
75	Fecal bacterial community of finishing beef steers fed ruminally protected and non-protected active dried yeast. <i>Journal of Animal Science</i> , 2020 , 98,	0.7	5
74	72 Estimating the supply and movement of feed for beef production in Alberta, Canada. <i>Journal of Animal Science</i> , 2020 , 98, 46-46	0.7	
73	200 Effects of grain processing and undegradable fiber on rumen pH and fermentation of cattle fed high grain diets. <i>Journal of Animal Science</i> , 2020 , 98, 159-160	0.7	
72	PSV-12 Impact of grain processing and undegradable fiber on chewing behavior and feed sorting of finishing beef cattle. <i>Journal of Animal Science</i> , 2020 , 98, 219-219	0.7	
71	94 President Oral Presentation Pick: Grazing diverse combinations of tanniferous and non-tanniferous legumes: Implications for beef cattle performance and environmental impact. <i>Journal of Animal Science</i> , 2020 , 98, 76-77	0.7	
70	3-Nitrooxypropanol supplementation had little effect on fiber degradation and microbial colonization of forage particles when evaluated using the in situ ruminal incubation technique. <i>Journal of Dairy Science</i> , 2020 , 103, 8986-8997	4	5
69	Effect of a pine enhanced biochar on growth performance, carcass quality, and feeding behavior of feedlot steers. <i>Translational Animal Science</i> , 2020 , 4, 831-838	1.4	7
68	Greenhouse gas and ammonia emissions from stored manure from beef cattle supplemented 3-nitrooxypropanol and monensin to reduce enteric methane emissions. <i>Scientific Reports</i> , 2020 , 10, 19310	4.9	4
67	Grazing diverse combinations of tanniferous and non-tanniferous legumes: Implications for beef cattle performance and environmental impact. <i>Science of the Total Environment</i> , 2020 , 746, 140788	10.2	11
66	Milk production, nitrogen utilization, and methane emissions of dairy cows grazing grass, forb, and legume-based pastures. <i>Journal of Animal Science</i> , 2020 , 98,	0.7	7
65	Mitigation of greenhouse gas emissions from beef cattle production systems. <i>Acta Agriculturae Scandinavica - Section A: Animal Science</i> , 2020 , 69, 220-232	0.6	3

64	Seaweed and Seaweed Bioactives for Mitigation of Enteric Methane: Challenges and Opportunities. <i>Animals</i> , 2020 , 10,	3.1	24
63	PSVI-11 Effects of nutrient management and cropping strategies in a dual-crop forage production system of silage corn and perennial grass on nutritional quality and predicted milk production of dairy cattle. <i>Journal of Animal Science</i> , 2020 , 98, 433-434	0.7	
62	Farm scale modelling of greenhouse gas emissions from semi-intensive suckler cow beef production. <i>Agricultural Systems</i> , 2019 , 176, 102670	6.1	8
61	Treatment of feces from beef cattle fed the enteric methane inhibitor 3-nitrooxypropanol. <i>Water Science and Technology</i> , 2019 , 80, 437-447	2.2	3
60	A Pine Enhanced Biochar Does Not Decrease Enteric CH Emissions, but Alters the Rumen Microbiota. <i>Frontiers in Veterinary Science</i> , 2019 , 6, 308	3.1	19
59	Effect of Encapsulated Nitrate and Microencapsulated Blend of Essential Oils on Growth Performance and Methane Emissions from Beef Steers Fed Backgrounding Diets. <i>Animals</i> , 2019 , 9,	3.1	15
58	Effects of urea plus nitrate pretreated rice straw and corn oil supplementation on fiber digestibility, nitrogen balance, rumen fermentation, microbiota and methane emissions in goats. <i>Journal of Animal Science and Biotechnology</i> , 2019 , 10, 6	6	8
57	Effects of 3-nitrooxypropanol on enteric methane production, rumen fermentation, and feeding behavior in beef cattle fed a high-forage or high-grain diet ¹ . <i>Journal of Animal Science</i> , 2019 , 97, 2687-2699	0.7	19
56	Use of gallic acid and hydrolyzable tannins to reduce methane emission and nitrogen excretion in beef cattle fed a diet containing alfalfa silage ^{1,2} . <i>Journal of Animal Science</i> , 2019 , 97, 2230-2244	0.7	25
55	Prospects of Forage Production in Northern Regions under Climate and Land-Use Changes: A Case-Study of a Dairy Farm in Newfoundland, Canada. <i>Agronomy</i> , 2019 , 9, 31	3.6	11
54	Effects of a recombinant fibrolytic enzyme on fiber digestion, ruminal fermentation, nitrogen balance, and total tract digestibility of heifers fed a high forage diet ¹ . <i>Journal of Animal Science</i> , 2019 , 97, 3578-3587	0.7	6
53	Effect of tannin-containing hays on enteric methane emissions and nitrogen partitioning in beef cattle ¹ . <i>Journal of Animal Science</i> , 2019 , 97, 3286-3299	0.7	30
52	Pasture chemoscapes and their ecological services. <i>Translational Animal Science</i> , 2019 , 3, 829-841	1.4	14
51	Recombinant fibrolytic feed enzymes and ammonia fibre expansion (AFEX) pretreatment of crop residues to improve fibre degradability in cattle. <i>Animal Feed Science and Technology</i> , 2019 , 256, 114260 ³		6
50	Potential of Molecular Weight and Structure of Tannins to Reduce Methane Emissions from Ruminants: A Review. <i>Animals</i> , 2019 , 9,	3.1	32
49	Short-Term Eating Preference of Beef Cattle Fed High Forage or High Grain Diets Supplemented with 3-Nitrooxypropanol. <i>Animals</i> , 2019 , 10,	3.1	7
48	Recent advances to improve nitrogen efficiency of grain-finishing cattle in North American and Australian feedlots. <i>Animal Production Science</i> , 2019 , 59, 2082	1.4	7
47	PSXIV-21 Effect of high-tannin sorghum grain on rumen fermentation and methane production in vitro. <i>Journal of Animal Science</i> , 2019 , 97, 432-432	0.7	78

46	Corn oil supplementation enhances hydrogen use for biohydrogenation, inhibits methanogenesis, and alters fermentation pathways and the microbial community in the rumen of goats. <i>Journal of Animal Science</i> , 2019 , 97, 4999-5008	0.7	9
45	A partial life cycle assessment of the greenhouse gas mitigation potential of feeding 3-nitrooxypropanol and nitrate to cattle. <i>Agricultural Systems</i> , 2019 , 169, 14-23	6.1	11
44	The effect of diet of the donor cows on in vitro measurements of methane production from wheat and corn incubated in various forage-to-grain ratios. <i>Journal of the Science of Food and Agriculture</i> , 2019 , 99, 3451-3458	4.3	3
43	Urea plus nitrate pretreatment of rice and wheat straws enhances degradation and reduces methane production in in vitro ruminal culture. <i>Journal of the Science of Food and Agriculture</i> , 2018 , 98, 5205-5211	4.3	11
42	Estimating gas volume from headspace pressure in a batch culture system. <i>Canadian Journal of Animal Science</i> , 2018 , 98, 593-596	0.9	10
41	Water use intensity of Canadian beef production in 1981 as compared to 2011. <i>Science of the Total Environment</i> , 2018 , 619-620, 1030-1039	10.2	9
40	Effects of feeding corn silage from short-season hybrids and extending the backgrounding period on production performance and carcass traits of beef cattle. <i>Journal of Animal Science</i> , 2018 , 96, 2490-2503	0.7	8
39	Effect of feeding condensed tannins in high protein finishing diets containing corn distillers grains on ruminal fermentation, nutrient digestibility, and route of nitrogen excretion in beef cattle. <i>Journal of Animal Science</i> , 2018 , 96, 4398-4413	0.7	26
38	Feeding condensed tannins to mitigate ammonia emissions from beef feedlot cattle fed high-protein finishing diets containing distillers grains. <i>Journal of Animal Science</i> , 2018 , 96, 4414-4430	0.7	20
37	New recombinant fibrolytic enzymes for improved in vitro ruminal fiber degradability of barley straw1. <i>Journal of Animal Science</i> , 2018 , 96, 3928-3942	0.7	15
36	The combined effects of supplementing monensin and 3-nitrooxypropanol on methane emissions, growth rate, and feed conversion efficiency in beef cattle fed high-forage and high-grain diets. <i>Journal of Animal Science</i> , 2018 , 96, 2923-2938	0.7	38
35	Review: Adaptation of ruminant livestock production systems to climate changes. <i>Animal</i> , 2018 , 12, s445-s456	3.4	32
34	In situ rumen degradation of kernels from short-season corn silage hybrids as affected by processing. <i>Translational Animal Science</i> , 2018 , 2, 428-438	1.4	3
33	Effect of engineered biocarbon on rumen fermentation, microbial protein synthesis, and methane production in an artificial rumen (RUSITEC) fed a high forage diet. <i>Journal of Animal Science</i> , 2018 , 96, 3121-3130	0.7	22
32	Corn Forage Yield and Quality for Silage in Short Growing Season Areas of the Canadian Prairies. <i>Agronomy</i> , 2018 , 8, 164	3.6	33
31	Beef production and ecosystem services in Canada's prairie provinces: A review. <i>Agricultural Systems</i> , 2018 , 166, 152-172	6.1	15
30	Effect of changes in management practices and animal performance on ammonia emissions from Canadian beef production in 1981 as compared with 2011. <i>Canadian Journal of Animal Science</i> , 2018 , 98, 833-844	0.9	3
29	Comparison of greenhouse gas emissions from corn- and barley-based dairy production systems in Eastern Canada. <i>Agricultural Systems</i> , 2017 , 152, 38-46	6.1	8

28	The effects of feeding 3-nitrooxypropanol at two doses on milk production, rumen fermentation, plasma metabolites, nutrient digestibility, and methane emissions in lactating Holstein cows. <i>Animal Production Science</i> , 2017 , 57, 282	1.4	36
27	Molecular hydrogen generated by elemental magnesium supplementation alters rumen fermentation and microbiota in goats. <i>British Journal of Nutrition</i> , 2017 , 118, 401-410	3.6	17
26	In situ and in vitro evaluations of a slow release form of nitrate for ruminants: Nitrate release rate, rumen nitrate metabolism and the production of methane, hydrogen, and nitrous oxide. <i>Animal Feed Science and Technology</i> , 2017 , 231, 97-106	3	15
25	Repeated inoculation of cattle rumen with bison rumen contents alters the rumen microbiome and improves nitrogen digestibility in cattle. <i>Scientific Reports</i> , 2017 , 7, 1276	4.9	39
24	Demonstrating the Effect of Forage Source on the Carbon Footprint of a Canadian Dairy Farm Using Whole-Systems Analysis and the Holos Model: Alfalfa Silage vs. Corn Silage. <i>Climate</i> , 2017 , 5, 87	3.1	17
23	Redirection of Metabolic Hydrogen by Inhibiting Methanogenesis in the Rumen Simulation Technique (RUSITEC). <i>Frontiers in Microbiology</i> , 2017 , 8, 393	5.7	33
22	Inferring the Skeletal Muscle Developmental Changes of Grazing and Barn-Fed Goats from Gene Expression Data. <i>Journal of Agricultural and Food Chemistry</i> , 2016 , 64, 6791-800	5.7	4
21	Shifts in Rumen Fermentation and Microbiota Are Associated with Dissolved Ruminal Hydrogen Concentrations in Lactating Dairy Cows Fed Different Types of Carbohydrates. <i>Journal of Nutrition</i> , 2016 , 146, 1714-21	4.1	36
20	Comparison of two live <i>Bacillus</i> species as feed additives for improving in vitro fermentation of cereal straws. <i>Animal Science Journal</i> , 2016 , 87, 27-36	1.8	10
19	Cloning, Phylogenetic Analysis, and Distribution of Free Fatty Acid Receptor GPR120 Expression along the Gastrointestinal Tract of Housing versus Grazing Kid Goats. <i>Journal of Agricultural and Food Chemistry</i> , 2016 , 64, 2333-41	5.7	10
18	Fermentation of Ammonia Fiber Expansion Treated and Untreated Barley Straw in a Rumen Simulation Technique Using Rumen Inoculum from Cattle with Slow versus Fast Rate of Fiber Disappearance. <i>Frontiers in Microbiology</i> , 2016 , 7, 1839	5.7	16
17	Synergism of Cattle and Bison Inoculum on Ruminal Fermentation and Select Bacterial Communities in an Artificial Rumen (Rusitec) Fed a Barley Straw Based Diet. <i>Frontiers in Microbiology</i> , 2016 , 7, 2032	5.7	13
16	Evaluation of Different Yeast Species for Improving In vitro Fermentation of Cereal Straws. <i>Asian-Australasian Journal of Animal Sciences</i> , 2016 , 29, 230-40	2.4	13
15	Rumen development process in goats as affected by supplemental feeding v. grazing: age-related anatomic development, functional achievement and microbial colonisation. <i>British Journal of Nutrition</i> , 2015 , 113, 888-900	3.6	52
14	Alfalfa and Other Perennial Legume Silage. <i>Agronomy</i> , 2015 , 633-664	0.8	2
13	A review of feeding supplementary nitrate to ruminant animals: nitrate toxicity, methane emissions, and production performance. <i>Canadian Journal of Animal Science</i> , 2014 , 94, 557-570	0.9	97
12	Bacterial communities in the rumen of Holstein heifers differ when fed orchardgrass as pasture vs. hay. <i>Frontiers in Microbiology</i> , 2014 , 5, 689	5.7	26
11	Greenhouse gas emission intensities of grass silage based dairy and beef production: A systems analysis of Norwegian farms. <i>Livestock Science</i> , 2013 , 152, 239-252	1.7	38

10	Characterization of the core rumen microbiome in cattle during transition from forage to concentrate as well as during and after an acidotic challenge. <i>PLoS ONE</i> , 2013 , 8, e83424	3.7	208
9	Structures of free-living and protozoa-associated methanogen communities in the bovine rumen differ according to comparative analysis of 16S rRNA and mcrA genes. <i>Microbiology (United Kingdom)</i> , 2012 , 158, 1808-1817	2.9	47
8	Optimum extent of barley grain processing and barley silage proportion in feedlot cattle diets: Growth, feed efficiency, and fecal characteristics. <i>Canadian Journal of Animal Science</i> , 2011 , 91, 411-422	0.9	14
7	Life cycle assessment of greenhouse gas emissions from beef production in western Canada: A case study. <i>Agricultural Systems</i> , 2010 , 103, 371-379	6.1	240
6	Methane abatement strategies for cattle: Lipid supplementation of diets. <i>Canadian Journal of Animal Science</i> , 2007 , 87, 431-440	0.9	96
5	Enteric methane emissions from growing beef cattle as affected by diet and level of intake. <i>Canadian Journal of Animal Science</i> , 2006 , 86, 401-408	0.9	40
4	Trichoderma enzymes promote Fibrobacter succinogenes S85 adhesion to, and degradation of, complex substrates but not pure cellulose. <i>Journal of the Science of Food and Agriculture</i> , 2004 , 84, 1083-1090	4.3	25
3	Effects of exogenous fibrolytic enzymes on epiphytic microbial populations and in vitro digestion of silage. <i>Journal of the Science of Food and Agriculture</i> , 2002 , 82, 760-768	4.3	23
2	Plant seed oil-bodies as an immobilization matrix for a recombinant xylanase from the rumen fungus <i>Neocallimastix patriciarum</i> . <i>Molecular Breeding</i> , 1997 , 3, 463-470	3.4	58
1	Application of β -nitrooxypropanol and canola oil to mitigate enteric methane emissions of beef cattle results in distinctly different effects on the rumen microbial community		2