# Ermias Kebreab

#### List of Publications by Citations

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

212 papers 6,658 citations

46 h-index

73 g-index

224 ext. papers

8,024 ext. citations

**3.1** avg, IF

5.8 L-index

#	Paper	IF	Citations
212	Special topicsMitigation of methane and nitrous oxide emissions from animal operations: I. A review of enteric methane mitigation options. <i>Journal of Animal Science</i> , <b>2013</b> , 91, 5045-69	0.7	456
211	Prediction of methane production from dairy and beef cattle. <i>Journal of Dairy Science</i> , <b>2007</b> , 90, 3456-6	564	233
210	A review of efficiency of nitrogen utilisation in lactating dairy cows and its relationship with environmental pollution. <i>Journal of Animal and Feed Sciences</i> , <b>2000</b> , 9, 1-32	1.5	194
209	Ruminal pH regulation and nutritional consequences of low pH. <i>Animal Feed Science and Technology</i> , <b>2012</b> , 172, 22-33	3	170
208	Technical options for the mitigation of direct methane and nitrous oxide emissions from livestock: a review. <i>Animal</i> , <b>2013</b> , 7 Suppl 2, 220-34	3.1	154
207	Nitrogen pollution by dairy cows and its mitigation by dietary manipulation. <i>Nutrient Cycling in Agroecosystems</i> , <b>2001</b> , 60, 275-285	3.3	154
206	Agroecology: A Review from a Global-Change Perspective. <i>Annual Review of Environment and Resources</i> , <b>2011</b> , 36, 193-222	17.2	152
205	Methane and nitrous oxide emissions from Canadian animal agriculture: A review. <i>Canadian Journal of Animal Science</i> , <b>2006</b> , 86, 135-157	0.9	147
204	Aspects of rumen microbiology central to mechanistic modelling of methane production in cattle. <i>Journal of Agricultural Science</i> , <b>2008</b> , 146, 213-233	1	142
203	Modelling the implications of feeding strategy on rumen fermentation and functioning of the rumen wall. <i>Animal Feed Science and Technology</i> , <b>2008</b> , 143, 3-26	3	139
202	Estimation of the stoichiometry of volatile fatty acid production in the rumen of lactating cows. <i>Journal of Theoretical Biology</i> , <b>2006</b> , 238, 36-51	2.3	129
201	Invited review: Sustainability of the US dairy industry. <i>Journal of Dairy Science</i> , <b>2013</b> , 96, 5405-25	4	128
200	A mechanistic model of whole-tract digestion and methanogenesis in the lactating dairy cow: model development, evaluation, and application. <i>Journal of Animal Science</i> , <b>2001</b> , 79, 1584-97	0.7	128
199	Climate-smart agriculture global research agenda: scientific basis for action. <i>Agriculture and Food Security</i> , <b>2014</b> , 3,	3.1	121
198	Model for estimating enteric methane emissions from United States dairy and feedlot cattle. <i>Journal of Animal Science</i> , <b>2008</b> , 86, 2738-48	0.7	109
197	Special topicsMitigation of methane and nitrous oxide emissions from animal operations: III. A review of animal management mitigation options. <i>Journal of Animal Science</i> , <b>2013</b> , 91, 5095-113	0.7	106
196	Long-term effects of feeding monensin on methane production in lactating dairy cows. <i>Journal of Dairy Science</i> , <b>2007</b> , 90, 1781-8	4	101

195	Prediction of enteric methane emissions from cattle. <i>Global Change Biology</i> , <b>2014</b> , 20, 2140-8	11.4	93
194	Prediction of enteric methane production, yield, and intensity in dairy cattle using an intercontinental database. <i>Global Change Biology</i> , <b>2018</b> , 24, 3368-3389	11.4	92
193	Evaluation of enteric methane prediction equations for dairy cows used in whole farm models. <i>Global Change Biology</i> , <b>2010</b> , 16, 3246-3256	11.4	90
192	Review of current in vivo measurement techniques for quantifying enteric methane emission from ruminants. <i>Animal Feed Science and Technology</i> , <b>2016</b> , 219, 13-30	3	80
191	Predicting milk yield and composition in lactating sows: a Bayesian approach. <i>Journal of Animal Science</i> , <b>2012</b> , 90, 2285-98	0.7	77
190	Inclusion of Asparagopsis armata in lactating dairy cows[diet reduces enteric methane emission by over 50 percent. <i>Journal of Cleaner Production</i> , <b>2019</b> , 234, 132-138	10.3	71
189	Design, implementation and interpretation of in vitro batch culture experiments to assess enteric methane mitigation in ruminants review. <i>Animal Feed Science and Technology</i> , <b>2016</b> , 216, 1-18	3	69
188	Cranial dimensions and forces of biting in the domestic dog. <i>Journal of Anatomy</i> , <b>2009</b> , 214, 362-73	2.9	64
187	Effect of supplementing myristic acid in dairy cow rations on ruminal methanogenesis and fatty acid profile in milk. <i>Journal of Dairy Science</i> , <b>2007</b> , 90, 1851-8	4	64
186	Modeling methane production from beef cattle using linear and nonlinear approaches. <i>Journal of Animal Science</i> , <b>2009</b> , 87, 1334-45	0.7	62
185	Models for predicting enteric methane emissions from dairy cows in North America, Europe, and Australia and New Zealand. <i>Global Change Biology</i> , <b>2016</b> , 22, 3039-56	11.4	61
184	Anti-methanogenic effects of monensin in dairy and beef cattle: a meta-analysis. <i>Journal of Dairy Science</i> , <b>2013</b> , 96, 5161-73	4	61
183	Social and ecological analysis of commercial integrated crop livestock systems: Current knowledge and remaining uncertainty. <i>Agricultural Systems</i> , <b>2017</b> , 155, 136-146	6.1	60
182	Ruminal temperature may aid in the detection of subacute ruminal acidosis. <i>Journal of Dairy Science</i> , <b>2008</b> , 91, 202-7	4	57
181	Some methodological and analytical considerations regarding application of the gas production technique. <i>Animal Feed Science and Technology</i> , <b>2007</b> , 135, 139-156	3	57
180	Calibration of estimated biting forces in domestic canids: comparison of post-mortem and in vivo measurements. <i>Journal of Anatomy</i> , <b>2008</b> , 212, 769-80	2.9	54
179	Application of the gas production technique to feed evaluation systems for ruminants. <i>Animal Feed Science and Technology</i> , <b>2005</b> , 123-124, 561-578	3	54
178	Animal production for efficient phosphate utilization: from optimized feed to high efficiency livestock. <i>Current Opinion in Biotechnology</i> , <b>2012</b> , 23, 872-7	11.4	52

177	Predicting the profile of nutrients available for absorption: from nutrient requirement to animal response and environmental impact. <i>Animal</i> , <b>2007</b> , 1, 99-111	3.1	52
176	An integrated mathematical model to evaluate nutrient partition in dairy cattle between the animal and its environment. <i>Animal Feed Science and Technology</i> , <b>2004</b> , 112, 131-154	3	52
175	Nitrous Oxide Emissions from a Clay Soil Receiving Granular Urea Formulations and Dairy Manure. <i>Agronomy Journal</i> , <b>2014</b> , 106, 732-744	2.2	51
174	Quantifying the effect of monensin dose on the rumen volatile fatty acid profile in high-grain-fed beef cattle. <i>Journal of Animal Science</i> , <b>2012</b> , 90, 2717-26	0.7	51
173	Evaluation of models to predict the stoichiometry of volatile fatty acid profiles in rumen fluid of lactating Holstein cows. <i>Journal of Dairy Science</i> , <b>2011</b> , 94, 3063-80	4	50
172	The effect of energy supplementation on nitrogen utilization in lactating dairy cows fed grass silage diets. <i>Journal of Animal Science</i> , <b>2001</b> , 79, 240-6	0.7	49
171	Environmental impact of using specialty feed ingredients in swine and poultry production: A life cycle assessment. <i>Journal of Animal Science</i> , <b>2016</b> , 94, 2664-81	0.7	49
170	Alternatives to linear analysis of energy balance data from lactating dairy cows. <i>Journal of Dairy Science</i> , <b>2003</b> , 86, 2904-13	4	48
169	Study of the lactation curve in dairy cattle on farms in central Mexico. <i>Journal of Dairy Science</i> , <b>2004</b> , 87, 3789-99	4	48
168	Red seaweed (Asparagopsis taxiformis) supplementation reduces enteric methane by over 80 percent in beef steers. <i>PLoS ONE</i> , <b>2021</b> , 16, e0247820	3.7	48
167	Rumen stoichiometric models and their contribution and challenges in predicting enteric methane production. <i>Animal Feed Science and Technology</i> , <b>2011</b> , 166-167, 761-778	3	46
166	A kinetic model of phosphorus metabolism in growing goats. <i>Journal of Animal Science</i> , <b>2000</b> , 78, 2706-	12. <sub>7</sub>	44
165	Short communication: Antimethanogenic effects of 3-nitrooxypropanol depend on supplementation dose, dietary fiber content, and cattle type. <i>Journal of Dairy Science</i> , <b>2018</b> , 101, 9041-	9 <del>0</del> 47	43
164	A multilevel nonlinear mixed-effects approach to model growth in pigs. <i>Journal of Animal Science</i> , <b>2010</b> , 88, 638-49	0.7	43
163	A mathematical approach to predicting biological values from ruminal pH measurements. <i>Journal of Dairy Science</i> , <b>2007</b> , 90, 3777-85	4	43
162	Effect of high-sugar grasses on methane emissions simulated using a dynamic model. <i>Journal of Dairy Science</i> , <b>2012</b> , 95, 272-85	4	42
161	Multivariate and univariate analysis of energy balance data from lactating dairy cows. <i>Journal of Dairy Science</i> , <b>2015</b> , 98, 4012-29	4	40
160	Short communication: effects of supplementation with pomegranate seed pulp on concentrations of conjugated linoleic acid and punicic acid in goat milk. <i>Journal of Dairy Science</i> , <b>2011</b> , 94, 4075-80	4	38

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159	A review of mathematical functions for the analysis of growth in poultry. <i>Worldn Poultry Science Journal</i> , <b>2010</b> , 66, 227-240	3	38	
158	Feedlot efficiency implications on greenhouse gas emissions and sustainability. <i>Journal of Animal Science</i> , <b>2011</b> , 89, 2643-56	0.7	37	
157	Simulating the effects of grassland management and grass ensiling on methane emission from lactating cows. <i>Journal of Agricultural Science</i> , <b>2010</b> , 148, 55-72	1	37	
156	Beneficial management practices and mitigation of greenhouse gas emissions in the agriculture of the Canadian Prairie: a review. <i>Agronomy for Sustainable Development</i> , <b>2011</b> , 31, 433-451	6.8	36	
155	A Model of the Effects of a Wide Range of Constant and Alternating Temperatures on Seed Germination of Four Orobanche Species. <i>Annals of Botany</i> , <b>1999</b> , 84, 549-557	4.1	36	
154	Predicting nitrogen excretion from cattle. <i>Journal of Dairy Science</i> , <b>2015</b> , 98, 3025-35	4	35	
153	An evaluation of different growth functions for describing the profile of live weight with time (age) in meat and egg strains of chicken. <i>Poultry Science</i> , <b>2003</b> , 82, 1536-43	3.9	35	
152	The effect of water stress on the temperature range for germination of Orobanche aegyptiaca seeds. <i>Seed Science Research</i> , <b>2000</b> , 10, 127-133	1.3	34	
151	Effects of phytase supplementation on phosphorus retention in broilers and layers: a meta-analysis. <i>Poultry Science</i> , <b>2014</b> , 93, 1981-92	3.9	30	
150	The effect of high-sugar grass on predicted nitrogen excretion and milk yield simulated using a dynamic model. <i>Journal of Dairy Science</i> , <b>2011</b> , 94, 3105-18	4	29	
149	Thermodynamic Driving Force of Hydrogen on Rumen Microbial Metabolism: A Theoretical Investigation. <i>PLoS ONE</i> , <b>2016</b> , 11, e0161362	3.7	29	
148	Mitigation of enteric methane emissions from global livestock systems through nutrition strategies. <i>Climatic Change</i> , <b>2016</b> , 137, 467-480	4.5	28	
147	Flexible alternatives to the Gompertz equation for describing growth with age in turkey hens. <i>Poultry Science</i> , <b>2010</b> , 89, 371-8	3.9	28	
146	Development and evaluation of a dynamic model of calcium and phosphorus flows in layers. <i>Poultry Science</i> , <b>2009</b> , 88, 680-9	3.9	28	
145	Comparative evaluation of mathematical functions to describe growth and efficiency of phosphorus utilization in growing pigs. <i>Journal of Animal Science</i> , <b>2007</b> , 85, 2498-507	0.7	28	
144	Estimating the energetic cost of feeding excess dietary nitrogen to dairy cows. <i>Journal of Dairy Science</i> , <b>2017</b> , 100, 7116-7126	4	27	
143	Estimating the Energetic Contribution of Polar Bear (Ursus maritimus) Summer Diets to the Total Energy Budget. <i>Journal of Mammalogy</i> , <b>2009</b> , 90, 585-593	1.8	27	
142	Prediction of enteric methane production, yield and intensity of beef cattle using an intercontinental database. <i>Agriculture, Ecosystems and Environment</i> , <b>2019</b> , 283, 106575	5.7	25	

141	Methane and nitrous oxide emissions from Canadian dairy farms and mitigation options: An updated review. <i>Canadian Journal of Animal Science</i> , <b>2016</b> , 96, 306-331	0.9	25
140	Calcium and phosphorus dynamics in commercial laying hens housed in conventional or enriched cage systems. <i>Poultry Science</i> , <b>2011</b> , 90, 2383-96	3.9	25
139	Effect of dietary crude protein and forage contents on enteric methane emissions and nitrogen excretion from dairy cows simultaneously. <i>Animal Production Science</i> , <b>2016</b> , 56, 312	1.4	25
138	Effects of different levels of an enzyme mixture on in vitro gas production parameters of contrasting forages. <i>Animal Feed Science and Technology</i> , <b>2008</b> , 146, 289-301	3	24
137	A model of phosphorus digestion and metabolism in the lactating dairy cow. <i>Journal of Dairy Science</i> , <b>2008</b> , 91, 2021-32	4	23
136	SIMULATION OF INTEGRATED CONTROL STRATEGIES FOR OROBANCHE SPP. BASED ON A LIFE CYCLE MODEL. <i>Experimental Agriculture</i> , <b>2001</b> , 37, 37-51	1.7	23
135	Land-use change emissions from soybean feed embodied in Brazilian pork and poultry meat. <i>Journal of Cleaner Production</i> , <b>2018</b> , 172, 2646-2654	10.3	22
134	Modeling the trade-off between diet costs and methane emissions: A goal programming approach. Journal of Dairy Science, <b>2015</b> , 98, 5557-71	4	22
133	Effect of heat processing on ruminal degradability and intestinal disappearance of nitrogen and amino acids in Iranian whole soybean. <i>Livestock Science</i> , <b>2008</b> , 113, 43-51	1.7	21
132	On the analysis of Canadian Holstein dairy cow lactation curves using standard growth functions. Journal of Dairy Science, <b>2015</b> , 98, 2701-12	4	20
131	Nutritional and Environmental Effects on Ammonia Emissions from Dairy Cattle Housing: A Meta-Analysis. <i>Journal of Environmental Quality</i> , <b>2016</b> , 45, 1123-32	3.4	20
130	Prediction of drinking water intake by dairy cows. <i>Journal of Dairy Science</i> , <b>2016</b> , 99, 7191-7205	4	19
129	Quantifying body water kinetics and fecal and urinary water output from lactating Holstein dairy cows. <i>Journal of Dairy Science</i> , <b>2014</b> , 97, 6177-95	4	19
128	Modelling the lactation curve of dairy cows using the differentials of growth functions. <i>Journal of Agricultural Science</i> , <b>2008</b> , 146, 633-641	1	19
127	Meta-analysis of phosphorus balance data from growing pigs. <i>Journal of Animal Science</i> , <b>2007</b> , 85, 1953	- <b>6</b> 17	19
126	Long-term effects of feeding monensin on milk fatty acid composition in lactating dairy cows. <i>Journal of Dairy Science</i> , <b>2007</b> , 90, 5126-33	4	19
125	A revised model for studying phosphorus and calcium kinetics in growing sheep. <i>Journal of Animal Science</i> , <b>2006</b> , 84, 2787-94	0.7	19
124	Feed additives as a strategic approach to reduce enteric methane production in cattle: modes of action, effectiveness and safety. <i>Animal Production Science</i> , <b>2021</b> ,	1.4	19

## (2011-2017)

123	plasma amino acids and blood urea in dairy cows: A multilevel mixed-effects meta-analysis. <i>Journal of Dairy Science</i> , <b>2017</b> , 100, 8053-8071	4	18	
122	Effect of temperature and humidity on the longevity of Orobanche seeds. Weed Research, 1999, 39,	199-241	18	
121	Impairments in pyridoxine-dependent sulphur amino acid metabolism are highly sensitive to the degree of vitamin B6 deficiency and repletion in the pig. <i>Animal</i> , <b>2009</b> , 3, 826-37	3.1	17	
120	A comparison of the Schumacher with other functions for describing growth in pigs. <i>Animal Feed Science and Technology</i> , <b>2008</b> , 143, 314-327	3	17	
119	Modeling small-scale dairy farms in central Mexico using multi-criteria programming. <i>Journal of Dairy Science</i> , <b>2006</b> , 89, 1662-72	4	17	
118	Key Considerations for the Use of Seaweed to Reduce Enteric Methane Emissions From Cattle. <i>Frontiers in Veterinary Science</i> , <b>2020</b> , 7, 597430	3.1	17	
117	Short communication: Evaluation of nitrogen excretion equations from cattle. <i>Journal of Dairy Science</i> , <b>2016</b> , 99, 7669-7678	4	16	
116	Livestock methane emissions in the United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, E1320	11.5	16	
115	Methane emissions from dairy lagoons in the western United States. <i>Journal of Dairy Science</i> , <b>2017</b> , 100, 6785-6803	4	15	
114	Improving adoption of technologies and interventions for increasing supply of quality livestock feed in low- and middle-income countries. <i>Global Food Security</i> , <b>2020</b> , 26, 100372	8.3	15	
113	Effect of calving interval and parity on milk yield per feeding day in Danish commercial dairy herds. Journal of Dairy Science, <b>2016</b> , 99, 621-33	4	15	
112	Production performance and nitrogen flow of Shaver White layers housed in enriched or conventional cage systems. <i>Poultry Science</i> , <b>2011</b> , 90, 543-54	3.9	15	
111	A comparative evaluation of functions for the analysis of growth in male broilers. <i>Journal of Agricultural Science</i> , <b>2003</b> , 140, 451-459	1	15	
110	Effects of contrasting forage diets on phosphorus utilisation in lactating dairy cows. <i>Livestock Science</i> , <b>2005</b> , 93, 125-135		15	
109	A general compartmental model for interpreting gas production profiles. <i>Animal Feed Science and Technology</i> , <b>2005</b> , 123-124, 473-485	3	14	
108	Energy and nutrient deposition and excretion in the reproducing sow: model development and evaluation. <i>Journal of Animal Science</i> , <b>2014</b> , 92, 2458-72	0.7	13	
107	A multivariate nonlinear mixed effects method for analyzing energy partitioning in growing pigs. Journal of Animal Science, <b>2010</b> , 88, 2361-72	0.7	13	
106	Estimating digestible methionine requirements for laying hens using multivariate nonlinear mixed effect models. <i>Poultry Science</i> , <b>2011</b> , 90, 1496-507	3.9	13	

105	Evaluation of a mechanistic lactation model using cow, goat and sheep data. <i>Journal of Agricultural Science</i> , <b>2010</b> , 148, 249-262	1	13
104	Comparison of energy evaluation systems and a mechanistic model for milk production by dairy cattle offered fresh grass-based diets. <i>Animal Feed Science and Technology</i> , <b>2008</b> , 143, 203-219	3	13
103	Phosphorus utilization and environmental and economic implications of reducing phosphorus pollution from Ontario dairy cows. <i>Journal of Dairy Science</i> , <b>2008</b> , 91, 241-6	4	13
102	Greenhouse gas, water, and land footprint per unit of production of the California dairy industry over 50 years. <i>Journal of Dairy Science</i> , <b>2020</b> , 103, 3760-3773	4	12
101	Meta-analysis of factors that affect the utilization efficiency of phosphorus in lactating dairy cows. Journal of Dairy Science, <b>2013</b> , 96, 3936-49	4	12
100	A comparative evaluation of functions for partitioning nitrogen and amino acid intake between maintenance and growth in broilers. <i>Journal of Agricultural Science</i> , <b>2008</b> , 146, 163-170	1	12
99	MILK Symposium review: Sustainability of dairy production and consumption in low-income countries with emphasis on productivity and environmental impact. <i>Journal of Dairy Science</i> , <b>2020</b> , 103, 9791-9802	4	12
98	Effect of Mootral-a garlic- and citrus-extract-based feed additive-on enteric methane emissions in feedlot cattle. <i>Translational Animal Science</i> , <b>2019</b> , 3, 1383-1388	1.4	11
97	Casein infusion rate influences feed intake differently depending on metabolizable protein balance in dairy cows: A multilevel meta-analysis. <i>Journal of Dairy Science</i> , <b>2016</b> , 99, 2748-2761	4	11
96	Predictions of enteric methane emissions for various summer pasture and winter feeding strategies for cow calf production. <i>Animal Feed Science and Technology</i> , <b>2011</b> , 166-167, 678-687	3	11
95	A Bayesian approach to analyze energy balance data from lactating dairy cows. <i>Journal of Dairy Science</i> , <b>2011</b> , 94, 2520-31	4	11
94	Estimation of enteric methane emissions trends (1990\(\mathbb{\textit{0}}008\)) from Manitoba beef cattle using empirical and mechanistic models. <i>Canadian Journal of Animal Science</i> , <b>2011</b> , 91, 305-321	0.9	11
93	Farming systems methodology for efficient resource management at the farm level: a review from an Indian perspective. <i>Journal of Agricultural Science</i> , <b>2008</b> , 146, 493-505	1	11
92	Effects of management practices prior to and during ensiling and concentrate type on nitrogen utilization in dairy cows. <i>Journal of Dairy Science</i> , <b>2000</b> , 83, 1274-85	4	11
91	Impact of dietary manipulation on nutrient flows and greenhouse gas emissions in cattle. <i>Revista Brasileira De Zootecnia</i> , <b>2010</b> , 39, 458-464	1.2	11
90	A life cycle analysis (LCA) primer for the agricultural community. <i>Agronomy Journal</i> , <b>2020</b> , 112, 3788-380	<b>)7</b> .2	10
89	H NMR-based metabolomics study of breast meat from Pekin and Linwu duck of different ages and relation to meat quality. <i>Food Research International</i> , <b>2020</b> , 133, 109126	7	10
88	Effects of diet and exercise interventions on diabetes risk factors in adults without diabetes: meta-analyses of controlled trials. <i>Diabetology and Metabolic Syndrome</i> , <b>2014</b> , 6, 127	5.6	10

## (2021-2017)

87	Exogenous Emannanase improves feed conversion efficiency and reduces somatic cell count in dairy cattle. <i>Journal of Dairy Science</i> , <b>2017</b> , 100, 244-252	4	10
86	Feed management practices to reduce manure phosphorus excretion in dairy cattle. <i>Advances in Animal Biosciences</i> , <b>2013</b> , 4, 37-41	0.3	10
85	Evaluation of models to describe ruminal degradation kinetics from in situ ruminal incubation of whole soybeans. <i>Journal of Dairy Science</i> , <b>2006</b> , 89, 3087-95	4	10
84	A comparative evaluation of functions for describing the relationship between live-weight gain and metabolizable energy intake in turkeys. <i>Journal of Agricultural Science</i> , <b>2004</b> , 142, 691-695	1	10
83	Effect of energy and protein supplementation on phosphorus utilization in lactating dairy cows. <i>Journal of Animal and Feed Sciences</i> , <b>2005</b> , 14, 63-77	1.5	10
82	Prediction and evaluation of enteric methane emissions from lactating dairy cows using different levels of covariate information. <i>Animal Production Science</i> , <b>2016</b> , 56, 557	1.4	10
81	Carbon and blue water footprints of California sheep production. <i>Journal of Animal Science</i> , <b>2019</b> , 97, 945-961	0.7	10
80	Evaluation of the performance of existing mathematical models predicting enteric methane emissions from ruminants: Animal categories and dietary mitigation strategies. <i>Animal Feed Science and Technology</i> , <b>2019</b> , 255, 114207	3	9
79	Effects of dietary grape seed polyphenols supplementation during late gestation and lactation on antioxidant status in serum and immunoglobulin content in colostrum of multiparous sows1. <i>Journal of Animal Science</i> , <b>2019</b> , 97, 2515-2523	0.7	9
78	Impact of nutrition and salinity changes on biological performances of green and white sturgeon. <i>PLoS ONE</i> , <b>2015</b> , 10, e0122029	3.7	9
77	Prediction of phosphorus output in manure and milk by lactating dairy cows. <i>Journal of Dairy Science</i> , <b>2016</b> , 99, 771-82	4	9
76	Determination of protein and amino acid requirements of lactating sows using a population-based factorial approach. <i>Animal</i> , <b>2015</b> , 9, 1319-28	3.1	9
75	A mathematical model for determining age-specific diabetes incidence and prevalence using body mass index. <i>Annals of Epidemiology</i> , <b>2013</b> , 23, 248-54	6.4	9
74	Effect of dietary phytase supplementation on greenhouse gas emissions from soil after swine manure application. <i>Journal of Cleaner Production</i> , <b>2017</b> , 166, 1122-1130	10.3	9
73	Development of mathematical models to predict volume and nutrient composition of fresh manure from lactating Holstein cows. <i>Animal Production Science</i> , <b>2014</b> , 54, 1927	1.4	9
7 <sup>2</sup>	Long-term effects of feeding diets without mineral phosphorus supplementation on the performance and phosphorus excretion in high-yielding dairy cows. <i>Canadian Journal of Animal Science</i> , <b>2007</b> , 87, 639-646	0.9	9
71	Forage production and nutrient availability in small-scale dairy systems in central Mexico using linear programming and partial budgeting. <i>Nutrient Cycling in Agroecosystems</i> , <b>2004</b> , 69, 191-201	3.3	9
70	Assessing the multiple resource use associated with pig feed consumption in the European Union. <i>Science of the Total Environment</i> , <b>2021</b> , 759, 144306	10.2	9

69	Individual milk fatty acids are potential predictors of enteric methane emissions from dairy cows fed a wide range of diets: Approach by meta-analysis. <i>Journal of Dairy Science</i> , <b>2019</b> , 102, 10616-10631	4	8
68	Improving the prediction of methane production and representation of rumen fermentation for finishing beef cattle within a mechanistic model. <i>Canadian Journal of Animal Science</i> , <b>2014</b> , 94, 509-524	0.9	8
67	Application of the law of diminishing returns for partitioning metabolizable energy and crude protein intake between maintenance and growth in growing male and female broiler breeder pullets. <i>Journal of Agricultural Science</i> , <b>2011</b> , 149, 385-394	1	8
66	Application of the law of diminishing returns to estimate maintenance requirement for amino acids and their efficiency of utilization for accretion in young chicks. <i>Journal of Agricultural Science</i> , <b>2009</b> , 147, 383-390	1	8
65	A model on biological flow of phosphorus in growing pigs. <i>Arquivo Brasileiro De Medicina Veterinaria E Zootecnia</i> , <b>2009</b> , 61, 691-697	0.3	8
64	A new modeling environment for integrated dairy system management. <i>Animal Frontiers</i> , <b>2019</b> , 9, 25-32	5.5	7
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53	Partitioning the efficiency of utilization of amino acids in growing broilers: Multiple linear regression and multivariate approaches. <i>PLoS ONE</i> , <b>2018</b> , 13, e0208488	3.7	6
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43	Analysis of feeding strategies for small-scale dairy systems in central Mexico using linear programming. <i>Journal of Animal and Feed Sciences</i> , <b>2005</b> , 14, 607-624	1.5	4
42	Ammonia Emissions from Dairy Lagoons in the Western U.S <i>Transactions of the ASABE</i> , <b>2018</b> , 61, 1001-	10.55	4
41	Effects of diet and manure storage method on carbon and nitrogen dynamics during storage and plant nitrogen uptake. <i>Agriculture, Ecosystems and Environment</i> , <b>2017</b> , 250, 51-58	5.7	3
40	An extended model of phosphorus metabolism in growing ruminants. <i>Journal of Animal Science</i> , <b>2011</b> , 89, 4151-62	0.7	3
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34	Potential Cost and Environmental Impact of Feeding High-Oil Corn to Poultry in Brazil. <i>Journal of Applied Poultry Research</i> , <b>2005</b> , 14, 463-475	2	3

33	Evaluating sugarcane diets for dairy cows using a digestion model. <i>Tropical Animal Health and Production</i> , <b>2001</b> , 33, 127-39	1.7	3
32	A critique of the Cornell Net Carbohydrate and Protein System with emphasis on dairy cattle. 3. The requirements model. <i>Journal of Animal and Feed Sciences</i> , <b>2001</b> , 10, 361-383	1.5	3
31	Review of research to inform California's climate scoping plan: Agriculture and working lands. <i>California Agriculture</i> , <b>2017</b> , 71, 160-168	1.1	3
30	Effects of FOXO1 on the proliferation and cell cycle-, apoptosis- and steroidogenesis-related genes expression in sheep granulosa cells. <i>Animal Reproduction Science</i> , <b>2020</b> , 221, 106604	2.1	3
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28	Evaluation of greenhouse gas emissions from hog manure application in a Canadian cowfalf production system using whole-farm models. <i>Animal Production Science</i> , <b>2016</b> , 56, 1722	1.4	3
27	Past peak lactational performance of Iranian Holstein cows fed raw or roasted whole soybeans. <i>Canadian Journal of Animal Science</i> , <b>2007</b> , 87, 441-447	0.9	2
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25	Analysis of the calving pattern of herds in small-scale dairy systems in central Mexico. <i>Journal of Animal and Feed Sciences</i> , <b>2004</b> , 13, 557-573	1.5	2
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23	Effects of Notch2 on proliferation, apoptosis and steroidogenesis in bovine luteinized granulosa cells. <i>Theriogenology</i> , <b>2021</b> , 171, 55-63	2.8	2
22	Enteric methane mitigation interventions <i>Translational Animal Science</i> , <b>2022</b> , 6, txac041	1.4	2
21	Symposium review: Development of a funding program to support research on enteric methane mitigation from ruminants. <i>Journal of Dairy Science</i> , <b>2022</b> ,	4	2
20	Exogenous Emannanase supplementation improved immunological and metabolic responses in lactating dairy cows. <i>Journal of Dairy Science</i> , <b>2019</b> , 102, 4198-4204	4	1
19	Phosphorus utilization in broilers fed with diets supplemented with different feed ingredients. <i>Scientia Agricola</i> , <b>2019</b> , 76, 18-23	2.5	1
18	Estimating enteric methane emissions from Chilean beef fattening systems using a mechanistic model. <i>Journal of Agricultural Science</i> , <b>2015</b> , 153, 114-123	1	1
17	An evaluation of uptake and developmental impact in the semi-arid tropics of four crop production models. <i>Journal of Agricultural Science</i> , <b>2000</b> , 134, 173-180	1	1
16	Net reductions in greenhouse gas emissions from feed additive use in California dairy cattle. <i>PLoS ONE</i> , <b>2020</b> , 15, e0234289	3.7	1

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15	Inhibited Methanogenesis in the Rumen of Cattle: Microbial Metabolism in Response to Supplemental 3-Nitrooxypropanol and Nitrate. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 705613	5.7	1
14	A life cycle assessment of the environmental impacts of cattle feedlot finishing rations.  International Journal of Life Cycle Assessment, <b>2021</b> , 26, 1779-1793	4.6	1
13	Prediction of enteric methane production and yield in dairy cattle using a Latin America and Caribbean database <i>Science of the Total Environment</i> , <b>2022</b> , 153982	10.2	1
12	A dynamic growth model for prediction of nutrient partitioning and manure production in growing-finishing pigs: Model development and evaluation. <i>Journal of Animal Science</i> , <b>2015</b> , 93, 1061-73	0.7	O
11	Evaluating growth response of broiler chickens fed diets supplemented with synthetic DL-methionine or DL-hydroxy methionine: a meta-analysis <i>Poultry Science</i> , <b>2022</b> , 101, 101762	3.9	O
10	Quantitative joint evaluation of sheep enteric methane emissions and faecal dry matter and nitrogen excretion. <i>Agriculture, Ecosystems and Environment</i> , <b>2021</b> , 305, 107116	5.7	O
9	Effects of red macroalgae supplementation on the shelf life of fresh whole muscle beef. Translational Animal Science, <b>2021</b> , 5, txab056	1.4	O
8	A mechanistic thermal balance model of dairy cattle. <i>Biosystems Engineering</i> , <b>2021</b> , 209, 256-270	4.8	O
7	Cross-talk between NOTCH2 and BMP4/SMAD signaling pathways in bovine follicular granulosa cells <i>Theriogenology</i> , <b>2022</b> , 187, 74-81	2.8	O
6	Beef production simulation of nitrate and lipid supplements for pasture and rangeland fed enterprises. <i>Agricultural Systems</i> , <b>2019</b> , 170, 19-27	6.1	
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4	Interpreting experimental data on egg productionapplications of dynamic differential equations. <i>Poultry Science</i> , <b>2013</b> , 92, 2498-508	3.9	
3	Technological innovations in animal production related to environmental sustainability. <i>Revista Brasileira De Saude E Producao Animal</i> , <b>2012</b> , 13, 923-937	0.8	
2	Phosphorus Utilization in Animal Agriculture <b>2017</b> , 123-131		
1	Maintenance energy requirement and efficiency of utilisation of metabolisable energy for milk production of Bos taurus Bos indicus crossbred tropical dairy cows: a meta-analysis. <i>Animal Production Science</i> , <b>2021</b> , 61, 1338	1.4	