Peter J Moate

List of Publications by Year
in descending order

85 papers	4,202 citations	126907 33 h-index	118850 62 g-index
85 all docs	85 docs citations	85 times ranked	4355 citing authors

#	Article	IF	Citations
1	BOARD-INVITED REVIEW: Recent advances in biohydrogenation of unsaturated fatty acids within the rumen microbial ecosystem1. Journal of Animal Science, 2008, 86, 397-412.	0.5	574
2	MINMOD Millennium: A Computer Program to Calculate Glucose Effectiveness and Insulin Sensitivity from the Frequently Sampled Intravenous Glucose Tolerance Test. Diabetes Technology and Therapeutics, 2003, 5, 1003-1015.	4.4	372
3	An inhibitor persistently decreased enteric methane emission from dairy cows with no negative effect on milk production. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10663-10668.	7.1	301
4	Prediction of enteric methane production, yield, and intensity in dairy cattle using an intercontinental database. Global Change Biology, 2018, 24, 3368-3389.	9.5	166
5	Grape marc reduces methane emissions when fed to dairy cows. Journal of Dairy Science, 2014, 97, 5073-5087.	3.4	132
6	cis-9, trans-11 Conjugated Linoleic Acid Is Synthesized Directly from Vaccenic Acid in Lactating Dairy Cattle. Journal of Nutrition, 2006, 136, 570-575.	2.9	130
7	WinSAAM: a windows-based compartmental modeling system. Metabolism: Clinical and Experimental, 2003, 52, 1153-1166.	3.4	110
8	Metagenomic Predictions: From Microbiome to Complex Health and Environmental Phenotypes in Humans and Cattle. PLoS ONE, 2013, 8, e73056.	2.5	103
9	Background matters with the SF6 tracer method for estimating enteric methane emissions from dairy cows: A critical evaluation of the SF6 procedure. Animal Feed Science and Technology, 2011, 170, 265-276.	2.2	84
10	Milk Fatty Acids. I. Variation in the Concentration of Individual Fatty Acids in Bovine Milk. Journal of Dairy Science, 2007, 90, 4730-4739.	3.4	79
11	Effects of feeding algal meal high in docosahexaenoic acid on feed intake, milk production, and methane emissions in dairy cows. Journal of Dairy Science, 2013, 96, 3177-3188.	3.4	79
12	A modified sulphur hexafluoride tracer technique enables accurate determination of enteric methane emissions from ruminants. Animal Feed Science and Technology, 2014, 197, 47-63.	2.2	77
13	The rate of de novo galactose synthesis in patients with galactose-1-phosphate uridyltransferase deficiency. Molecular Genetics and Metabolism, 2004, 81, 22-30.	1.1	75
14	High throughput whole rumen metagenome profiling using untargeted massively parallel sequencing. BMC Genetics, 2012, 13, 53.	2.7	68
15	Pharmacokinetic profile and behavioral effects of gabapentin in the horse. Journal of Veterinary Pharmacology and Therapeutics, 2010, 33, 485-494.	1.3	60
16	In vitro screening of selected feed additives, plant essential oils and plant extracts for rumen methane mitigation. Journal of the Science of Food and Agriculture, 2014, 94, 1191-1196.	3.5	60
17	Proanthocyanidins (condensed tannin) destabilise plant protein foams in a dose dependent manner. Australian Journal of Agricultural Research, 1995, 46, 1101.	1.5	59
18	A model to describe ruminal metabolism and intestinal absorption of long chain fatty acids. Animal Feed Science and Technology, 2004, 112, 79-105.	2.2	58

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19	Dry matter intake, nutrient selection and milk production of dairy cows grazing rainfed perennial pastures at different herbage allowances in spring. Australian Journal of Experimental Agriculture, 1999, 39, 923.	1.0	57
20	Global Survey of the Bovine Salivary Proteome: Integrating Multidimensional Prefractionation, Targeted, and Glycocapture Strategies. Journal of Proteome Research, 2011, 10, 5059-5069.	3.7	55
21	Investigating the effect of two methane-mitigating diets on the rumen microbiome using massively parallel sequencing. Journal of Dairy Science, 2013, 96, 6030-6046.	3.4	54
22	Pharmacodynamic effects and pharmacokinetic profile of a long-term continuous rate infusion of racemic ketamine in healthy conscious horses. Journal of Veterinary Pharmacology and Therapeutics, 2006, 29, 477-488.	1.3	52
23	Milk Bottom-Up Proteomics: Method Optimization. Frontiers in Genetics, 2015, 6, 360.	2.3	52
24	Metagenomics of rumen bacteriophage from thirteen lactating dairy cattle. BMC Microbiology, 2013, 13, 242.	3.3	51
25	Rumen gases and bloat in grazing dairy cows. Journal of Agricultural Science, 1997, 129, 459-469.	1.3	47
26	Comprehensive polar lipid identification and quantification in milk by liquid chromatographyâ€“mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2015, 978-979, 95-102.	2.3	46
27	Pharmacokinetics of fentanyl delivered transdermally in healthy adult horses ? variability among horses and its clinical implications. Journal of Veterinary Pharmacology and Therapeutics, 2006, 29, 539-546.	1.3	45
28	Reducing the carbon footprint of Australian milk production by mitigation of enteric methane emissions. Animal Production Science, 2016, 56, 1017.	1.3	42
29	A modified logistic model to describe gadolinium kinetics in breast tumors. Magnetic Resonance Imaging, 2004, 22, 467-473.	1.8	41
30	The Pharmacokinetics of Esmolol in Pediatric Subjects with Supraventricular Arrhythmias. Pediatric Cardiology, 2006, 27, 420-427.	1.3	39
31	Simple Liquid Chromatographyâ€“Mass Spectrometry Method for Quantification of Major Free Oligosaccharides in Bovine Milk. Journal of Agricultural and Food Chemistry, 2014, 62, 11568-11574.	5.2	38
32	Estimation of the content of fat and parenchyma in breast tissue using MRI T1 histograms and phantoms. Magnetic Resonance Imaging, 2005, 23, 591-599.	1.8	37
33	Effects of wild-type, AR1 and AR37 endophyte-infected perennial ryegrass on dairy production in Victoria, Australia. Animal Production Science, 2012, 52, 1117.	1.3	36
34	Volatile Fatty Acids in Ruminal Fluid Can Be Used to Predict Methane Yield of Dairy Cows. Animals, 2019, 9, 1006.	2.3	35
35	High frame-rate simultaneous bilateral breast DCE-MRI. Magnetic Resonance in Medicine, 2007, 57, 220-225.	3.0	34
36	A novel minimal model to describe NEFA kinetics following an intravenous glucose challenge. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 294, R1140-R1147.	1.8	33

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37	More frequent allocation of herbage does not improve the milk production of dairy cows in early lactation. Australian Journal of Experimental Agriculture, 2001, 41, 593.	1.0	32
38	Kinetics of Ruminal Lipolysis of Triacylglycerol and Biohydrogenation of Long-Chain Fatty Acids: New Insights from Old Data. Journal of Dairy Science, 2008, 91, 731-742.	3.4	31
39	Modelling the Effect of Diet Composition on Enteric Methane Emissions across Sheep, Beef Cattle and Dairy Cows. Animals, 2016, 6, 54.	2.3	31
40	Milk Fatty Acids II: Prediction of the Production of Individual Fatty Acids in Bovine Milk. Journal of Dairy Science, 2008, 91, 1175-1188.	3.4	30
41	Modeling circadian rhythms of food intake by means of parametric deconvolution: results from studies of the night eating syndrome. American Journal of Clinical Nutrition, 2008, 87, 1672-1677.	4.7	30
42	Pharmacokinetics of dexamethasone with pharmacokinetic/pharmacodynamic model of the effect of dexamethasone on endogenous hydrocortisone and cortisone in the horse. Journal of Veterinary Pharmacology and Therapeutics, 2005, 28, 71-80.	1.3	29
43	Effects of dietary cottonseed oil and tannin supplements on protein and fatty acid composition of bovine milk. Journal of Dairy Research, 2014, 81, 183-192.	1.4	28
44	Energy partitioning in herbage-fed dairy cows offered supplementary grain during an extended lactation. Journal of Dairy Science, 2013, 96, 484-494.	3.4	27
45	NEFA minimal model parameters estimated from the oral glucose tolerance test and the meal tolerance test. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 295, R395-R403.	1.8	26
46	Variations in the dietary cation-anion difference and the acid-base balance of dairy cows on a pasture-based diet in south-eastern Australia. Grass and Forage Science, 2000, 55, 26-36.	2.9	25
47	Pharmacokinetics of methylprednisolone acetate after intra-articular administration and its effect on endogenous hydrocortisone and cortisone secretion in horses. American Journal of Veterinary Research, 2006, 67, 654-662.	0.6	25
48	Pulmonary gas exchange in anaesthetised horses mechanically ventilated with oxygen or a helium/oxygen mixture. Equine Veterinary Journal, 2009, 41, 747-752.	1.7	25
49	Milk production and composition, and methane emissions from dairy cows fed lucerne hay with forage brassica or chicory. Animal Production Science, 2016, 56, 304.	1.3	25
50	Pharmacokinetics of imipenem-cilastatin following intravenous administration in healthy adult horses. Journal of Veterinary Pharmacology and Therapeutics, 2005, 28, 355-361.	1.3	24
51	Pharmacokinetics and disposition of clenbuterol in the horse. Journal of Veterinary Pharmacology and Therapeutics, 2004, 27, 71-77.	1.3	23
52	Declining sulphur hexafluoride permeability of polytetrafluoroethylene membranes causes overestimation of calculated ruminant methane emissions using the tracer technique. Animal Feed Science and Technology, 2013, 183, 86-95.	2.2	23
53	Methane emissions of dairy cows cannot be predicted by the concentrations of C8:0 and total C18 fatty acids in milk. Animal Production Science, 2014, 54, 1757.	1.3	23
54	Plasma Etoposide Catechol Increases in Pediatric Patients Undergoing Multiple-Day Chemotherapy with Etoposide. Clinical Cancer Research, 2004, 10, 2977-2985.	7.0	22

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55	Response of plasma glucose, insulin, and nonesterified fatty acids to intravenous glucose tolerance tests in dairy cows during a 670-day lactation. Journal of Dairy Science, 2015, 98, 179-189.	3.4	22
56	Evaluation of the performance of existing mathematical models predicting enteric methane emissions from ruminants: Animal categories and dietary mitigation strategies. Animal Feed Science and Technology, 2019, 255, 114207.	2.2	21
57	Effects of Feeding either Red or White Grape Marc on Milk Production and Methane Emissions from Early-Lactation Dairy Cows. Animals, 2020, 10, 976.	2.3	21
58	A partial life cycle assessment of the greenhouse gas mitigation potential of feeding 3-nitrooxypropanol and nitrate to cattle. Agricultural Systems, 2019, 169, 14-23.	6.1	20
59	Individual milk fatty acids are potential predictors of enteric methane emissions from dairy cows fed a wide range of diets: Approach by meta-analysis. Journal of Dairy Science, 2019, 102, 10616-10631.	3.4	18
60	Cefotaxime kinetics in plasma and synovial fluid following intravenous administration in horses. Journal of Veterinary Pharmacology and Therapeutics, 2004, 27, 293-298.	1.3	17
61	Reducing methane on-farm by feeding diets high in fat may not always reduce life cycle greenhouse gas emissions. International Journal of Life Cycle Assessment, 2014, 19, 69-78.	4.7	17
62	Influence of proportion of wheat in a pasture-based diet on milk yield, methane emissions, methane yield, and ruminal protozoa of dairy cows. Journal of Dairy Science, 2020, 103, 2373-2386.	3.4	17
63	Turnips and protein supplements for lactating dairy cows. Australian Journal of Experimental Agriculture, 1999, 39, 389.	1.0	15
64	A novel minimal model to describe non-esterified fatty acid kinetics in Holstein dairy cows. Journal of Dairy Research, 2008, 75, 13-18.	1.4	15
65	Short communication: Comparison of the GreenFeed system with the sulfur hexafluoride tracer technique for measuring enteric methane emissions from dairy cows. Journal of Dairy Science, 2016, 99, 5461-5465.	3.4	15
66	Identification and quantification of triacylglycerols containing n-3 long-chain polyunsaturated fatty acids in bovine milk. Journal of Dairy Science, 2015, 98, 8473-8485.	3.4	13
67	The Pharmacokinetics of Hemoglobin-Based Oxygen Carrier Hemoglobin Glutamer-200 Bovine in the Horse. Anesthesia and Analgesia, 2005, 100, 1570-1575.	2.2	12
68	Influence of dietary docosahexaenoic acid supplementation on the overall rumen microbiota of dairy cows and linkages with production parameters. Canadian Journal of Microbiology, 2014, 60, 267-275.	1.7	12
69	In vitro fermentability and methane production of some alternative forages in Australia. Animal Production Science, 2016, 56, 641.	1.3	12
70	Dietary Fat and Betaine Supplements Offered to Lactating Cows Affect Dry Matter Intake, Milk Production and Body Temperature Responses to an Acute Heat Challenge. Animals, 2021, 11, 3110.	2.3	10
71	Evaluation of low cost in-line milk samplers for estimating individual cow somatic cell counts. Journal of Dairy Research, 1997, 64, 13-22.	1.4	9
72	A numerical deconvolution method to estimate C-peptide secretion in humans after an intravenous glucose tolerance test. Metabolism: Clinical and Experimental, 2009, 58, 891-900.	3.4	9

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73	Michaelisâ€“Menten kinetics predict the rate of SF6 release from permeation tubes used to estimate methane emissions from ruminants. Animal Feed Science and Technology, 2015, 200, 47-56.	2.2	9
74	Temperature, but not submersion or orientation, influences the rate of sulphur hexafluoride release from permeation tubes used for estimation of ruminant methane emissions. Animal Feed Science and Technology, 2014, 194, 71-80.	2.2	8
75	Measurement of Enteric Methane Emissions by the SF6 Technique Is Not Affected by Ambient Weather Conditions. Animals, 2021, 11, 528.	2.3	8
76	AKA-Glucose: A Program for Kinetic and Epidemiological Analysis of Frequently Sampled Intravenous Glucose Tolerance Test Data Using Database Technology. Diabetes Technology and Therapeutics, 2005, 7, 298-307.	4.4	7
77	Dietary wheat and reduced methane yield are linked to rumen microbiome changes in dairy cows. PLoS ONE, 2022, 17, e0268157.	2.5	7
78	Comparison of enantiomers of organic acids for their effects on methane production in vitro. Animal Production Science, 2014, 54, 1345.	1.3	6
79	Evaluation of a compartmental model to describe non-esterified fatty acid kinetics in Holstein dairy cows. Journal of Dairy Research, 2007, 74, 430-437.	1.4	5
80	Mathematical formulae for accurate estimation of in vitro CH4 production from vented bottles. Animal Production Science, 2016, 56, 244.	1.3	5
81	Mordant factors that affect the fluorescence and counting of somatic cells by instruments. Journal of Dairy Research, 1995, 62, 373-394.	1.4	4
82	The effect of diet of the donor cows onin vitromeasurements of methane production from wheat and corn incubated in various forageâ€toâ€grain ratios. Journal of the Science of Food and Agriculture, 2019, 99, 3451-3458.	3.5	4
83	AKA-TPG: A Program for Kinetic and Epidemiological Analysis of Data from Labeled Glucose Investigations Using the Two-Pool Model and Database Technology. Diabetes Technology and Therapeutics, 2007, 9, 99-108.	4.4	2
84	Ten day composite milk samples give accurate somatic cell counts. Journal of Dairy Research, 1996, 63, 475-478.	1.4	1
85	Economic Threshold Analysis of Supplementing Dairy Cow Diets with Betaine and Fat during a Heat Challenge: A Pre- and Post-Experimental Comparison. Animals, 2022, 12, 92.	2.3	1