

# James France

## List of Publications by Year in descending order

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72  
papers

1,412  
citations

394421

19  
h-index

361022

35  
g-index

73  
all docs

73  
docs citations

73  
times ranked

1436  
citing authors

#	ARTICLE	IF	CITATIONS
1	Aspects of rumen microbiology central to mechanistic modelling of methane production in cattle. <i>Journal of Agricultural Science</i> , 2008, 146, 213-233.	1.3	179
2	Modelling growth and body composition in fish nutrition: where have we been and where are we going?. <i>Aquaculture Research</i> , 2010, 41, 161-181.	1.8	121
3	Evaluation of enteric methane prediction equations for dairy cows used in whole farm models. <i>Global Change Biology</i> , 2010, 16, 3246-3256.	9.5	105
4	Models for predicting enteric methane emissions from dairy cows in North America, Europe, and Australia and New Zealand. <i>Global Change Biology</i> , 2016, 22, 3039-3056.	9.5	103
5	Short communication: Antimethanogenic effects of 3-nitrooxypropanol depend on supplementation dose, dietary fiber content, and cattle type. <i>Journal of Dairy Science</i> , 2018, 101, 9041-9047.	3.4	88
6	Vascular Sources of Phenylalanine, Tyrosine, Lysine, and Methionine for Casein Synthesis in Lactating Goats. <i>Journal of Dairy Science</i> , 1999, 82, 362-377.	3.4	52
7	Multivariate and univariate analysis of energy balance data from lactating dairy cows. <i>Journal of Dairy Science</i> , 2015, 98, 4012-4029.	3.4	50
8	Mathematical modelling in animal nutrition: a centenary review. <i>Journal of Agricultural Science</i> , 2008, 146, 123-142.	1.3	49
9	A review of mathematical functions for the analysis of growth in poultry. <i>World's Poultry Science Journal</i> , 2010, 66, 227-240.	3.0	47
10	Simulating the effects of grassland management and grass ensiling on methane emission from lactating cows. <i>Journal of Agricultural Science</i> , 2010, 148, 55-72.	1.3	43
11	Effects of phytase supplementation on phosphorus retention in broilers and layers: A meta-analysis. <i>Poultry Science</i> , 2014, 93, 1981-1992.	3.4	41
12	The Contribution of Mathematical Modeling to Understanding Dynamic Aspects of Rumen Metabolism. <i>Frontiers in Microbiology</i> , 2016, 7, 1820.	3.5	37
13	Modelling the lactation curve of dairy cows using the differentials of growth functions. <i>Journal of Agricultural Science</i> , 2008, 146, 633-641.	1.3	29
14	An isotope dilution model for partitioning leucine uptake by the bovine mammary gland. <i>Journal of Theoretical Biology</i> , 1995, 172, 369-377.	1.7	27
15	Antimethanogenic effects of nitrate supplementation in cattle: A meta-analysis. <i>Journal of Dairy Science</i> , 2020, 103, 11375-11385.	3.4	27
16	Quantifying body water kinetics and fecal and urinary water output from lactating Holstein dairy cows. <i>Journal of Dairy Science</i> , 2014, 97, 6177-6195.	3.4	24
17	A meta-analysis of the effects of nonphytate phosphorus on broiler performance and tibia ash concentration. <i>Poultry Science</i> , 2015, 94, 2753-2762.	3.4	22
18	Evaluation of a mechanistic lactation model using cow, goat and sheep data. <i>Journal of Agricultural Science</i> , 2010, 148, 249-262.	1.3	21

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19	Mannoheptulose has differential effects on fasting and postprandial energy expenditure and respiratory quotient in adult Beagle dogs fed diets of different macronutrient contents. <i>Journal of Nutritional Science</i> , 2014, 3, e17.	1.9	20
20	Feed efficiency and the liver proteome of fattening lambs are modified by feed restriction during the suckling period. <i>Animal</i> , 2018, 12, 1838-1846.	3.3	20
21	A model of milk production in lactating dairy cows in relation to energy and nitrogen dynamics. <i>Journal of Dairy Science</i> , 2016, 99, 1605-1618.	3.4	16
22	Model of Milk Protein Synthesis. A Mechanistic Model of Milk Protein Synthesis in the Lactating Bovine Mammary Gland. <i>Journal of Theoretical Biology</i> , 1997, 187, 363-378.	1.7	15
23	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> , 2014, 6, 127.	2.7	15
24	A mechanistic model of small intestinal starch digestion and glucose uptake in the cow. <i>Journal of Dairy Science</i> , 2017, 100, 4650-4670.	3.4	15
25	An isotope dilution model for partitioning phenylalanine and tyrosine uptake by the mammary gland of lactating dairy cows. <i>Journal of Theoretical Biology</i> , 2014, 359, 54-60.	1.7	13
26	A dynamic mechanistic model of lactic acid metabolism in the rumen. <i>Journal of Dairy Science</i> , 2014, 97, 2398-2414.	3.4	12
27	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> , 2004, 142, 691-695.	1.3	11
28	Farming systems methodology for efficient resource management at the farm level: a review from an Indian perspective. <i>Journal of Agricultural Science</i> , 2008, 146, 493-505.	1.3	11
29	Predicting carcass energy content and composition in broilers using the group method of data handling-type neural networks. <i>Journal of Agricultural Science</i> , 2011, 149, 249-254.	1.3	11
30	Dietary Mannoheptulose Does Not Significantly Alter Daily Energy Expenditure in Adult Labrador Retrievers. <i>PLoS ONE</i> , 2015, 10, e0143324.	2.5	10
31	Application of a kinetic model to describe phosphorus metabolism in pigs fed a diet with a microbial phytase. <i>Journal of Agricultural Science</i> , 2010, 148, 277-286.	1.3	9
32	Dietary mannoheptulose has differential effects on fasting and post-prandial glucose oxidation in Labrador Retrievers. <i>Journal of Applied Animal Research</i> , 2015, 43, 357-365.	1.2	9
33	Phosphorus kinetics in lambs fed different levels of dicalcium phosphate. <i>Journal of Agricultural Science</i> , 2007, 145, 509-516.	1.3	8
34	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> , 2009, 147, 383-390.	1.3	8
35	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> , 2011, 149, 385-394.	1.3	8
36	Calcium and phosphorus utilization in growing sheep supplemented with dicalcium phosphate. <i>Journal of Agricultural Science</i> , 2013, 151, 424-433.	1.3	8

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37	Rumen phosphorus metabolism in sheep. <i>Journal of Agricultural Science</i> , 2009, 147, 391-398.	1.3	7
38	Evaluation of the SF6 tracer technique for estimating methane emission rates with reference to dairy cows using a mechanistic model. <i>Journal of Theoretical Biology</i> , 2014, 353, 1-8.	1.7	7
39	Prediction of portal and hepatic blood flow from intake level data in cattle. <i>Journal of Dairy Science</i> , 2016, 99, 9238-9253.	3.4	7
40	Technical note: Bayesian calibration of dynamic ruminant nutrition models. <i>Journal of Dairy Science</i> , 2016, 99, 6362-6370.	3.4	7
41	Application of Meta-Analysis and Machine Learning Methods to the Prediction of Methane Production from In Vitro Mixed Ruminal Micro-Organism Fermentation. <i>Animals</i> , 2020, 10, 720.	2.3	7
42	Bootstrapped neural network models for analyzing the responses of broiler chicks to dietary protein and branched chain amino acids. <i>Canadian Journal of Animal Science</i> , 2014, 94, 79-85.	1.5	6
43	Broiler responses to digestible total sulphur amino acids at different ages: a neural network approach. <i>Journal of Applied Animal Research</i> , 2016, 44, 315-322.	1.2	6
44	Further assessment of the protozoal contribution to the nutrition of the ruminant animal. <i>Journal of Theoretical Biology</i> , 2017, 416, 8-15.	1.7	6
45	Mathematical models for response to amino acids: estimating the response of broiler chickens to branched-chain amino acids using support vector regression and neural network models. <i>Neural Computing and Applications</i> , 2018, 30, 2499-2508.	5.6	6
46	Phosphorus utilization in broilers fed with diets supplemented with different feed ingredients. <i>Scientia Agricola</i> , 2019, 76, 18-23.	1.2	6
47	Modelling bovine spongiform encephalopathy. <i>Journal of Agricultural Science</i> , 2008, 146, 183-194.	1.3	5
48	Simplified estimation of forage degradability in the rumen assuming zero-order degradation kinetics. <i>Journal of Agricultural Science</i> , 2009, 147, 225-240.	1.3	5
49	Mathematical descriptions of indeterminate growth. <i>Journal of Theoretical Biology</i> , 2017, 425, 88-96.	1.7	5
50	Dietary mannoheptulose does not alter glucose or lipid metabolism in adult Labrador Retrievers. <i>Journal of Animal Physiology and Animal Nutrition</i> , 2018, 102, e122-e131.	2.2	5
51	Modeling Greenhouse Gas Emissions from Enteric Fermentation. <i>Advances in Agricultural Systems Modeling</i> , 2015, , 173-195.	0.3	4
52	An isotope dilution model for partitioning of phenylalanine and tyrosine uptake by the liver of lactating dairy cows. <i>Journal of Theoretical Biology</i> , 2018, 444, 100-107.	1.7	4
53	Simulation of milk production by dairy cows fed sugarcane top-based diets with locally available supplements under Indian conditions. <i>Journal of Agricultural Science</i> , 2005, 143, 217-229.	1.3	3
54	Effect of raw or roasted whole soybeans on early lactational performance and ruminal and blood metabolites in Iranian cows. <i>Journal of Agricultural Science</i> , 2007, 145, 529-537.	1.3	3

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55	Models for the Study of Whole-Body Glucose Kinetics: A Mathematical Synthesis. , 2013, 2013, 1-16.		3
56	Comparison of three <sup>15</sup> N methods to correct for microbial contamination when assessing in situ protein degradability of fresh forages <sup>1</sup> . Journal of Animal Science, 2014, 92, 5053-5062.	0.5	3
57	Evaluation of broiler chicks responses to protein, methionine and tryptophan using neural network models. Journal of Applied Animal Research, 2014, 42, 327-332.	1.2	3
58	A sinusoidal function and the Nelder-Mead simplex algorithm applied to growth data from broiler chickens. Poultry Science, 2018, 97, 227-235.	3.4	3
59	Elementary functions modified for seasonal effects to describe growth in freshwater fish <sup>°</sup> . Journal of Theoretical Biology, 2019, 461, 133-144.	1.7	3
60	Reply “ Simplified estimation of forage degradability in the rumen assuming zero-order kinetics and assumptions underlying the in situ polyester-bag technique. Journal of Agricultural Science, 2010, 148, 119-122.	1.3	2
61	Broiler responses to digestible threonine at different ages: a neural networks approach. Journal of Animal Physiology and Animal Nutrition, 2016, 100, 738-747.	2.2	2
62	Blue tongue “ A modelling examination of fundamentals “ Seasonality and chaos. Journal of Theoretical Biology, 2016, 403, 17-29.	1.7	2
63	Exploration of bimodal kinetics in marker digesta outflows using compartmental models. Journal of Theoretical Biology, 2018, 439, 226-231.	1.7	2
64	Modelling cumulative egg production in laying hens and parent stocks of broiler chickens using classical growth functions. British Poultry Science, 2019, 60, 564-569.	1.7	2
65	A Kinetic Model of Whole-Body Glucose Metabolism with Reference to the Domestic Dog (Canis lupus) Tj ETQq1 1 0.784314rgBT /Over	0.9	1
66	Estimating enteric methane emissions from Chilean beef fattening systems using a mechanistic model. Journal of Agricultural Science, 2015, 153, 114-123.	1.3	1
67	On the Description of Equine Somatic Growth Using Nonlinear Functions. Journal of Equine Veterinary Science, 2022, 111, 103893.	0.9	1
68	Comparison of two models of phosphorus flows in calves infected with <i>Cooperia punctata</i> . Proceedings of the British Society of Animal Science, 2005, 2005, 212-212.	0.0	0
69	Interpreting experimental data on egg production“ Applications of dynamic differential equations. Poultry Science, 2013, 92, 2498-2508.	3.4	0
70	Introducing a sinusoidal equation to describe lactation curves for cumulative milk yield and composition in Holstein cows. Journal of Dairy Research, 2020, 87, 220-225.	1.4	0
71	Modelling growth in dairy heifers based on linear body measurements (withers height) using non-linear functions. Journal of Dairy Research, 2022, , 1-4.	1.4	0
72	Further solutions to an isotope dilution model for partitioning phenylalanine and tyrosine between milk protein synthesis and other metabolic fates by the mammary gland of lactating dairy cows. Journal of Agricultural Science, 0, , 1-30.	1.3	0