Arjan Jonker

List of Publications by Year
in descending order

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Version: 2024-02-01

63 papers	2,200 citations	394390 19 h-index	243610 44 g-index
66 all docs	66 docs citations	66 times ranked	2184 citing authors

#	Article	IF	Citations
1	Rumen microbial community composition varies with diet and host, but a core microbiome is found across a wide geographical range. Scientific Reports, 2015, 5, 14567.	3.3	1,172
2	Gene network analysis identifies rumen epithelial cell proliferation, differentiation and metabolic pathways perturbed by diet and correlated with methane production. Scientific Reports, 2016, 6, 39022.	3.3	68
3	Genetic parameters of methane emissions determined using portable accumulation chambers in lambs and ewes grazing pasture and genetic correlations with emissions determined in respiration chambers1. Journal of Animal Science, 2018, 96, 3031-3042.	0.5	55
4	Buccal Swabbing as a Noninvasive Method To Determine Bacterial, Archaeal, and Eukaryotic Microbial Community Structures in the Rumen. Applied and Environmental Microbiology, 2015, 81, 7470-7483.	3.1	52
5	Molecular basis of protein structure in proanthocyanidin and anthocyanin-enhanced Lc-transgenic alfalfa in relation to nutritive value using synchrotron-radiation FTIR microspectroscopy: A novel approach. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 73, 846-853.	3.9	50
6	The Occurrence, Biosynthesis, and Molecular Structure of Proanthocyanidins and Their Effects on Legume Forage Protein Precipitation, Digestion and Absorption in the Ruminant Digestive Tract. International Journal of Molecular Sciences, 2017, 18, 1105.	4.1	46
7	Botanical traits, protein and carbohydrate fractions, ruminal degradability and energy contents of alfalfa hay harvested at three stages of maturity and in the afternoon and morning. Animal Feed Science and Technology, 2012, 172, 162-170.	2.2	31
8	Measuring methane from grazing dairy cows using GreenFeed. Animal Production Science, 2016, 56, 252.	1.3	30
9	Foam stability of leaves from anthocyanidinâ€accumulating Lcâ€alfalfa and relation to molecular structures detected by fourierâ€transformed infraredâ€vibration spectroscopy. Grass and Forage Science, 2012, 67, 369-381.	2.9	28
10	Enteric methane and carbon dioxide emissions measured using respiration chambers, the sulfur hexafluoride tracer technique, and a GreenFeed head-chamber system from beef heifers fed alfalfa silage at three allowances and four feeding frequencies1â€“3. Journal of Animal Science, 2016, 94, 4326-4337.	0.5	26
11	Metabolic characteristics of proteins and biomolecular spectroscopic profiles in different batches of feedstock (wheat) and their co-products (wheat distillers dried grains with solubles) from the same bioethanol processing plant. Journal of Dairy Science, 2012, 95, 6695-6715.	3.4	25
12	Effect of fresh pasture forage quality, feeding level and supplementation on methane emissions from growing beef cattle. Animal Production Science, 2016, 56, 1714.	1.3	25
13	Distribution of fatty acids and phospholipids in different table cuts and co-products from New Zealand pasture-fed Wagyu-dairy cross beef cattle. Meat Science, 2018, 140, 26-37.	5.5	24
14	Feeding lucerne silage to beef cattle at three allowances and four feeding frequencies affects circadian patterns of methane emissions, but not emissions per unit of intake. Animal Production Science, 2014, 54, 1350.	1.3	23
15	Methane emissions from lactating and non-lactating dairy cows and growing cattle fed fresh pasture. Animal Production Science, 2017, 57, 643.	1.3	23
16	The Role of Proanthocyanidins Complex in Structure and Nutrition Interaction in Alfalfa Forage. International Journal of Molecular Sciences, 2016, 17, 793.	4.1	22
17	Methane and carbon dioxide emissions from lactating dairy cows grazing mature ryegrass/white clover or a diverse pasture comprising ryegrass, legumes and herbs. Animal Production Science, 2019, 59, 1063.	1.3	22
18	Modeling degradation ratios and nutrient availability of anthocyanidin-accumulating Lc-alfalfa populations in dairy cows. Journal of Dairy Science, 2011, 94, 1430-1444.	3.4	21

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19	Nutrient composition and degradation profiles of anthocyanidin-accumulating Lc-alfalfa populations. Canadian Journal of Animal Science, 2010, 90, 401-412.	1.5	19
20	Modeling nutrient availability of alfalfa hay harvested at three stages of maturity and in the afternoon and morning in dairy cows. Animal Feed Science and Technology, 2012, 178, 12-19.	2.2	19
21	Effects of including alfalfa hay cut in the afternoon or morning at three stages of maturity in high concentrate rations on dairy cows performance, diet digestibility and feeding behavior. Animal Feed Science and Technology, 2014, 192, 62-72.	2.2	17
22	Inoculation and co-inoculation of alfalfa seedlings with root growth promoting microorganisms () Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 (structures, nutrient profiles and availability of hay for ruminants. Animal Nutrition, 2018, 4, 90-99.	5.1	17
23	Methane emissions differ between sheep offered a conventional diploid, a high-sugar diploid or a tetraploid perennial ryegrass cultivar at two allowances at three times of the year. Animal Production Science, 2018, 58, 1043.	1.3	16
24	Genetic parameters of plasma and ruminal volatile fatty acids in sheep fed alfalfa pellets and genetic correlations with enteric methane emissions1. Journal of Animal Science, 2019, 97, 2711-2724.	0.5	16
25	A meta-analysis comparing four measurement methods to determine the relationship between methane emissions and dry-matter intake in New Zealand dairy cattle. Animal Production Science, 2020, 60, 96.	1.3	16
26	A review of technical variations and protocols used to measure methane emissions from ruminants using respiration chambers, SF6 tracer technique and GreenFeed, to facilitate global integration of published data. Animal Feed Science and Technology, 2021, 279, 115018.	2.2	16
27	Nutrient profile and availability of coâ€products from bioethanol processing. Journal of Animal Physiology and Animal Nutrition, 2012, 96, 450-458.	2.2	15
28	Methane emissions changed nonlinearly with graded substitution of alfalfa silage with corn silage and corn grain in the diet of sheep and relation with rumen fermentation characteristics in vivo and in vitro1,2. Journal of Animal Science, 2016, 94, 3464-3475.	0.5	15
29	Feeding diets with fodder beet decreased methane emissions from dry and lactating dairy cows in grazing systems. Animal Production Science, 2017, 57, 1445.	1.3	15
30	Challenges and opportunities to capture dietary effects in on-farm greenhouse gas emissions models of ruminant systems. Science of the Total Environment, 2021, 769, 144989.	8.0	14
31	A Review: Plant Carbohydrate Typesâ€"The Potential Impact on Ruminant Methane Emissions. Frontiers in Veterinary Science, 0, 9, .	2.2	14
32	Non-destructive analysis of the conformational differences among feedstock sources and their corresponding co-products from bioethanol production with molecular spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 118, 407-421.	3.9	13
33	Across-Experiment Transcriptomics of Sheep Rumen Identifies Expression of Lipid/Oxo-Acid Metabolism and Muscle Cell Junction Genes Associated With Variation in Methane-Related Phenotypes. Frontiers in Genetics, 2018, 9, 330.	2.3	13
34	Carbohydrate and lipid spectroscopic molecular structures of different alfalfa hay and their relationship with nutrient availability in ruminants. Asian-Australasian Journal of Animal Sciences, 2017, 30, 1575-1589.	2.4	12
35	Fermentation, degradation and microbial nitrogen partitioning for three forage colour phenotypes within anthocyanidinâ€accumulating Lcâ€alfalfa progeny. Journal of the Science of Food and Agriculture, 2012, 92, 2265-2273.	3.5	11
36	Protein molecular structures in alfalfa hay cut at three stages of maturity and in the afternoon and morning and relationship with nutrient availability in ruminants. Journal of the Science of Food and Agriculture, 2013, 93, 3072-3080.	3.5	10

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37	Effect of transferring lignocellulose-degrading bacteria from termite to rumen fluid of sheep on in vitro gas production, fermentation parameters, microbial populations and enzyme activity. Journal of Integrative Agriculture, 2020, 19, 1323-1331.	3.5	10
38	Effect of Wheat-Based Dried Distillersâ€™ Grains with Solubles Inclusion on Barley-Based Feed Chemical Profile, Energy Values, Rumen Degradation Kinetics, and Protein Supply. Journal of Agricultural and Food Chemistry, 2012, 60, 4986-4993.	5.2	9
39	Effects of Feeding Level and Breed Composition on Intake, Digestibility, and Methane Emissions of Dairy Heifers. Animals, 2021, 11, 586.	2.3	9
40	Assessing protein availability of different bioethanol coproducts in dairy cattle. Animal, 2013, 7, 255-264.	3.3	8
41	Effects of forage type and age at which forage provision is started on growth performance, rumen fermentation, blood metabolites and intestinal enzymes in Holstein calves. Animal Production Science, 2018, 58, 2288.	1.3	8
42	Quantitative joint evaluation of sheep enteric methane emissions and faecal dry matter and nitrogen excretion. Agriculture, Ecosystems and Environment, 2021, 305, 107116.	5.3	8
43	Evaluation of the Feed Value for Ruminants of Blends of Corn and Wheat Distillers Dried Grains. Journal of Agricultural and Food Chemistry, 2013, 61, 4387-4395.	5.2	7
44	Effects of barley-based diets with 3 different rumen-degradable protein balances on performance and carcass characteristics of feedlot steers. The Professional Animal Scientist, 2014, 30, 432-443.	0.7	7
45	Diurnal variation in urine nitrogen and creatinine concentrations from lactating cows grazing ryegrass-dominant pasture in autumn and late springâ€“summer. Animal Production Science, 2017, 57, 1297.	1.3	7
46	Individual-level correlations of rumen volatile fatty acids with enteric methane emissions for ranking methane yield in sheep fed fresh pasture. Animal Production Science, 2021, 61, 300.	1.3	7
47	Crude protein fractionation, in situ ruminal degradability and FTIR protein molecular structures of different cultivars within barley, corn and sorghum cereal grains. Animal Feed Science and Technology, 2021, 275, 114855.	2.2	7
48	Sheep performance on perennial ryegrass cultivars differing in concentration of water-soluble carbohydrate. Journal of New Zealand Grasslands, 0, 77, 123-130.	0.0	7
49	Sheep from low-methane-yield selection lines created on alfalfa pellets also have lower methane yield under pastoral farming conditions1,2. Journal of Animal Science, 2017, 95, 3905-3913.	0.5	7
50	Effect of feeding fresh forage plantain (Plantago lanceolata) or ryegrass-based pasture on methane emissions, total-tract digestibility, and rumen fermentation of nonlactating dairy cows. Journal of Dairy Science, 2022, 105, 6628-6638.	3.4	7
51	Sheep from low-methane-yield selection lines created on alfalfa pellets also have lower methane yield under pastoral farming conditions. Journal of Animal Science, 2017, 95, 3905.	0.5	6
52	Protein Structures among Bio-Ethanol Co-Products and Its Relationships with Ruminal and Intestinal Availability of Protein in Dairy Cattle. International Journal of Molecular Sciences, 2013, 14, 16802-16816.	4.1	5
53	Nitrogen partitioning differs in sheep offered a conventional diploid, a high sugar diploid or a tetraploid perennial ryegrass cultivar at two feed allowances. Animal Feed Science and Technology, 2018, 245, 32-40.	2.2	5
54	Excreta emissions in progeny of low and high enteric methane yield selection line sheep fed pasture of different qualities. Animal Feed Science and Technology, 2019, 257, 114289.	2.2	4

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55	Review: Markers and proxies to monitor ruminal function and feed efficiency in young ruminants. Animal, 2021, 15, 100337.	3.3	4
56	Substituting ryegrass-based pasture with graded levels of forage rape in the diet of lambs decreases methane emissions and increases propionate, succinate, and primary alcohols in the rumen. Journal of Animal Science, 2022, 100, .	0.5	3
57	Breeding Low Emitting Ruminants: Predicting Methane from Microbes. Proceedings (mdpi), 2020, 36, .	0.2	2
58	Evaluation of Molly model predictions of ruminal fermentation, nutrient digestion, and performance by dairy cows consuming ryegrass-based diets. Journal of Dairy Science, 2021, 104, 9676-9702.	3.4	2
59	Assessment of atherogenic index, long-chain omega-3 fatty acid and phospholipid content of prime beef: a survey of commercially sourced New Zealand Wagyu and Angus beef cattle. Animal Production Science, 2020, , .	1.3	1
60	P3048 Gene network analysis identifies rumen epithelial processes perturbed by diet and correlated with methane production and yield. Journal of Animal Science, 2016, 94, 76-77.	0.5	0
61	Feeding Di-ammonium Phosphate as a Phosphorous Source in Finishing Lambs Reduced Excretion of Phosphorus in Feces without Detrimental Effects on Animal Performance. Asian-Australasian Journal of Animal Sciences, 2019, 32, 527-532.	2.4	0
62	Nitrogen excretion from beef cattle fed a wide range of diets compiled in an intercontinental dataset: a meta-analysis. Journal of Animal Science, 2022, , .	0.5	0
63	Methane emissions in growing heifers while eating from a feed bin compared with 24-hour emissions and relationship with feeding behavior. JDS Communications, 2022, 3, 255-259.	1.5	0