Massimo Bionaz

List of Publications by Year in Descending Order

103 papers	4,354 citations	31 h-index	65 g-index
134 ext. papers	5,222 ext. citations	2.8 avg, IF	5.86 L-index

#	Paper	IF	Citations
103	Pasture production and lamb growth in agrivoltaic system **2021**,		2
102	Short communication: Molecular markers for epithelial cells across gastrointestinal tissues and fecal RNA in preweaning dairy calves. *Journal of Dairy Science*, **2021**, 104, 1175-1182	4	1
101	Hepatic transcriptomic adaptation from prepartum to postpartum in dairy cows. *Journal of Dairy Science*, **2021**, 104, 1053-1072	4	1
100	Azolla leaf meal at 5% of the diet improves growth performance, intestinal morphology and p70S6K1 activation, and affects cecal microbiota in broiler chicken. *Animal*, **2021**, 15, 100362	3.1	5
99	Sun-dried Azolla leaf meal at 10% dietary inclusion improved growth, meat quality, and increased skeletal muscle Ribosomal protein S6 kinase 1 abundance in growing rabbit. *Animal*, **2021**, 15, 100348	3.1	1
98	Effect of milk vs. sugar-sweetened beverage supplementation on bone development in pre-pubertal pigs as model for children. *Italian Journal of Animal Science*, **2020**, 19, 1329-1340	2.2	
97	Effects of Whole Plant Homogenate on Lipid Metabolism, Inflammatory Conditions and Liver Function of Dairy Cows during the Transition Period. *Animals*, **2020**, 10,	3.1	4
96	Influence of level of inclusion of Azolla leaf meal on growth performance, meat quality and skeletal muscle p70S6 kinase abundance in broiler chickens. *Animal*, **2020**, 14, 2423-2432	3.1	8
95	Effects of 2,4-thiazolidinedione (TZD) on milk fatty acid profile and serum vitamins in dairy goats challenged with intramammary infusion of. *Journal of Dairy Research*, **2020**, 87, 416-423	1.6	
94	Long term conjugated linoleic acid supplementation modestly improved growth performance but induced testicular tissue apoptosis and reduced sperm quality in male rabbit. *PLoS ONE*, **2020**, 15, e0226070	3.7	6
93	Prepartum dietary energy intake alters adipose tissue transcriptome profiles during the periparturient period in Holstein dairy cows. *Journal of Animal Science and Biotechnology*, **2020**, 11, 1	6	32
92	A natural bioactive feed additive alters expression of genes involved in inflammation in whole blood of healthy Angus heifers. *Innate Immunity*, **2020**, 26, 285-293	2.7	0
91	Advances in fatty acids nutrition in dairy cows: from gut to cells and effects on performance. *Journal of Animal Science and Biotechnology*, **2020**, 11, 110	6	18
90	The Interplay Between Non-Esterified Fatty Acids and Bovine Peroxisome Proliferator-Activated Receptors: Results of an In Vivo-In Vitro Hybrid Approach. *Current Developments in Nutrition*, **2020**, 4, 1245-1245	0.4	1
89	Natural Products Sulforaphane and Brusatol Modulate NRF2 in Bovine Mammary Cells. *Current Developments in Nutrition*, **2020**, 4, 397-397	0.4	78
88	Milk production, nitrogen utilization, and methane emissions of dairy cows grazing grass, forb, and legume-based pastures. *Journal of Animal Science*, **2020**, 98,	0.7	7
87	Systems for evaluation of welfare on dairy farms. *Journal of Dairy Research*, **2020**, 87, 13-19	1.6	12

86	The interplay between non-esterified fatty acids and bovine peroxisome proliferator-activated receptors: results of an hybrid approach. *Journal of Animal Science and Biotechnology*, **2020**, 11, 91	6	8
85	Milk Production, N Partitioning, and Methane Emissions in Dairy Cows Grazing Mixed or Spatially Separated Simple and Diverse Pastures. *Animals*, **2020**, 10,	3.1	7
84	Interaction between inflammation and metabolism in periparturient dairy cows. *Journal of Animal Science*, **2020**, 98, S155-S174	0.7	10
83	Selenium biofortified alfalfa hay fed in low quantities improves selenium status and glutathione peroxidase activity in transition dairy cows and their calves. *Journal of Dairy Research*, **2020**, 87, 184-190	1.6	3
82	Long-Term Effects of Dietary Olive Oil and Hydrogenated Vegetable Oil on Expression of Lipogenic Genes in Subcutaneous Adipose Tissue of Dairy Cows. *Veterinary Sciences*, **2019**, 6,	2.4	3
81	Monensin controlled-release capsule administered in late-pregnancy differentially affects rumination patterns, metabolic status, and cheese-making properties of the milk in primiparous and multiparous cows. *Italian Journal of Animal Science*, **2019**, 18, 1271-1283	2.2	4
80	2,4-Thiazolidinedione in Well-Fed Lactating Dairy Goats: I. Effect on Adiposity and Milk Fat Synthesis. *Veterinary Sciences*, **2019**, 6,	2.4	3
79	Nutrigenomic Effect of Saturated and Unsaturated Long Chain Fatty Acids on Lipid-Related Genes in Goat Mammary Epithelial Cells: What Is the Role of PPAR? *Veterinary Sciences*, **2019**, 6,	2.4	9
78	2,4-Thiazolidinedione in Well-Fed Lactating Dairy Goats: II. Response to Intra-Mammary Infection. *Veterinary Sciences*, **2019**, 6,	2.4	3
77	Cow milk does not affect adiposity in growing piglets as a model for children. *Journal of Dairy Science*, **2019**, 102, 4798-4807	4	3
76	Flaxseed and Carbohydrase Enzyme Supplementation Alters Hepatic n-3 Polyunsaturated Fatty Acid Molecular Species and Expression of Genes Associated with Lipid Metabolism in Broiler Chickens. *Veterinary Sciences*, **2019**, 6,	2.4	7
75	Activation of liver X receptor promotes fatty acid synthesis in goat mammary epithelial cells via modulation of SREBP1 expression. *Journal of Dairy Science*, **2019**, 102, 3544-3555	4	10
74	Effect of Soybean Oil and Fish Oil on Lipid-Related Transcripts in Subcutaneous Adipose Tissue of Dairy Cows. *Animals*, **2019**, 10,	3.1	3
73	The role of altered immune function during the dry period in promoting the development of subclinical ketosis in early lactation. *Journal of Dairy Science*, **2019**, 102, 9241-9258	4	23
72	Heat stress negatively affects the transcriptome related to overall metabolism and milk protein synthesis in mammary tissue of midlactating dairy cows. *Physiological Genomics*, **2019**, 51, 400-409	3.6	14
71	Graduate Student Literature Review: The milk behind the mustache: A review of milk and bone biology. *Journal of Dairy Science*, **2019**, 102, 7608-7617	4	4
70	miRWoods: Enhanced precursor detection and stacked random forests for the sensitive detection of microRNAs. *PLoS Computational Biology*, **2019**, 15, e1007309	5	5
69	Nutrigenomic effect of conjugated linoleic acid on growth and meat quality indices of growing rabbit. *PLoS ONE*, **2019**, 14, e0222404	3.7	5

68	What is the norm in normalization? A frightening note on the use of RT-qPCR in the livestock science. *Gene: X*, **2019**, 721S, 100003	2.1	3
67	Transcriptome analysis showed differences of two purebred cattle and their crossbreds. *Italian Journal of Animal Science*, **2019**, 18, 70-79	2.2	0
66	Myogenic potential of mesenchymal stem cells isolated from porcine adipose tissue. *Cell and Tissue Research*, **2018**, 372, 507-522	4.2	9
65	Transcriptional changes detected in fecal RNA of neonatal dairy calves undergoing a mild diarrhea are associated with inflammatory biomarkers. *PLoS ONE*, **2018**, 13, e0191599	3.7	10
64	CRISPR/Cas9-mediated Stearoyl-CoA Desaturase 1 (SCD1) Deficiency Affects Fatty Acid Metabolism in Goat Mammary Epithelial Cells. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 10041-10052	5.7	19
63	Peroxisome proliferator-activated receptor does not regulate glucose uptake and lactose synthesis in bovine mammary epithelial cells cultivated in vitro. *Journal of Dairy Research*, **2018**, 85, 295-302	1.6	4
62	Use of Pig as a Model for Mesenchymal Stem Cell Therapies for Bone Regeneration. *Animal Biotechnology*, **2017**, 28, 275-287	1.4	20
61	Plasmid transfection in bovine cells: Optimization using a realtime monitoring of green fluorescent protein and effect on gene reporter assay. *Gene*, **2017**, 626, 200-208	3.8	11
60	2,4-Thiazolidinedione Treatment Improves the Innate Immune Response in Dairy Goats with Induced Subclinical Mastitis. *PPAR Research*, **2017**, 2017, 7097450	4.3	12
59	Transcriptome difference and potential crosstalk between liver and mammary tissue in mid-lactation primiparous dairy cows. *PLoS ONE*, **2017**, 12, e0173082	3.7	10
58	The importance of selecting the right internal control gene to study the effects of antenatal glucocorticoid administration in human placenta. *Placenta*, **2016**, 44, 19-22	3.4	3
57	Overexpression of SREBP1 (sterol regulatory element binding protein 1) promotes de novo fatty acid synthesis and triacylglycerol accumulation in goat mammary epithelial cells. *Journal of Dairy Science*, **2016**, 99, 783-95	4	87
56	The Impact of Intramammary Escherichia coli Challenge on Liver and Mammary Transcriptome and Cross-Talk in Dairy Cows during Early Lactation Using RNAseq. *PLoS ONE*, **2016**, 11, e0157480	3.7	19
55	0870 Percentages of milk fat, lactose, and protein are affected by diurnal variations in dairy goats. *Journal of Animal Science*, **2016**, 94, 418-418	0.7	
54	Mammary Gland: Gene Networks Controlling Development and Involution **2016**,		
53	0725 Effect of 2,4-thiazolidinedione treatment in the inflammatory response to induced subclinical mastitis in dairy goats receiving adequate vitamin supplementation. *Journal of Animal Science*, **2016** , 94, 347-348	0.7	
52	0100 Evaluation of immune function markers in OmniGen-AF supplemented steers. *Journal of Animal Science*, **2016**, 94, 46-46	0.7	1
51	Evaluation of Suitable Internal Control Genes for RT-qPCR in Yak Mammary Tissue during the Lactation Cycle. *PLoS ONE*, **2016**, 11, e0147705	3.7	14

50	Biosynthesis of milk fat, protein, and lactose: roles of transcriptional and posttranscriptional regulation. *Physiological Genomics*, **2016**, 48, 231-56	3.6	99
49	The dilution effect and the importance of selecting the right internal control genes for RT-qPCR: a paradigmatic approach in fetal sheep. *BMC Research Notes*, **2015**, 8, 58	2.3	10
48	TRIENNIAL LACTATION SYMPOSIUM: Nutrigenomics in livestock: Systems biology meets nutrition. *Journal of Animal Science*, **2015**, 93, 5554-74	0.7	23
47	Transcription Adaptation during In Vitro Adipogenesis and Osteogenesis of Porcine Mesenchymal Stem Cells: Dynamics of Pathways, Biological Processes, Up-Stream Regulators, and Gene Networks. *PLoS ONE*, **2015**, 10, e0137644	3.7	31
46	Unmasking Upstream Gene Expression Regulators with miRNA-corrected mRNA Data. *Bioinformatics and Biology Insights*, **2015**, 9, 33-48	5.3	
45	TRIENNIAL LACTATION SYMPOSIUM: Nutrigenomics in dairy cows: Nutrients, transcription factors, and techniques. *Journal of Animal Science*, **2015**, 93, 5531-53	0.7	40
44	Integrative analyses of hepatic differentially expressed genes and blood biomarkers during the peripartal period between dairy cows overfed or restricted-fed energy prepartum. *PLoS ONE*, **2014**, 9, e99757	3.7	31
43	Feed restriction, but not l-carnitine infusion, alters the liver transcriptome by inhibiting sterol synthesis and mitochondrial oxidative phosphorylation and increasing gluconeogenesis in mid-lactation dairy cows. *Journal of Dairy Science*, **2013**, 96, 2201-2213	4	27
42	Systems physiology in dairy cattle: nutritional genomics and beyond. *Annual Review of Animal Biosciences*, **2013**, 1, 365-92	13.7	96
41	Functional Role of PPARs in Ruminants: Potential Targets for Fine-Tuning Metabolism during Growth and Lactation. *PPAR Research*, **2013**, 2013, 684159	4.3	107
40	Physiological and Nutritional Roles of PPAR across Species. *PPAR Research*, **2013**, 2013, 807156	4.3	7
39	Reducing milking frequency during nutrient restriction has no effect on the hepatic transcriptome of lactating dairy cattle. *Physiological Genomics*, **2013**, 45, 1157-67	3.6	10
38	Transcriptomics Comparisons of Mac-T cells Versus Mammary Tissue during Late Pregnancy and Peak Lactation. *Journal of Advances in Dairy Research*, **2013**, 01,	0	1
37	280 OSTEOGENIC ACTIVITY OF IN HOUSE-PRODUCED PORCINE BMP2 ON ADIPOSE-DERIVED STEM CELLS. *Reproduction, Fertility and Development*, **2013**, 25, 288	1.8	2
36	Adipose-derived mesenchymal stem cells enhance healing of mandibular defects in the ramus of swine. *Journal of Oral and Maxillofacial Surgery*, **2012**, 70, e193-203	1.8	42
35	Blood immunometabolic indices and polymorphonuclear neutrophil function in peripartum dairy cows are altered by level of dietary energy prepartum. *Journal of Dairy Science*, **2012**, 95, 1749-58	4	79
34	Ruminant metabolic systems biology: reconstruction and integration of transcriptome dynamics underlying functional responses of tissues to nutrition and physiological state. *Gene Regulation and Systems Biology*, **2012**, 6, 109-25	2	25
33	A novel dynamic impact approach (DIA) for functional analysis of time-course omics studies: validation using the bovine mammary transcriptome. *PLoS ONE*, **2012**, 7, e32455	3.7	69

32	Old and new stories: revelations from functional analysis of the bovine mammary transcriptome during the lactation cycle. *PLoS ONE*, **2012**, 7, e33268	3.7	88
31	Transcriptomics comparison between porcine adipose and bone marrow mesenchymal stem cells during in vitro osteogenic and adipogenic differentiation. *PLoS ONE*, **2012**, 7, e32481	3.7	61
30	Milk Protein Synthesis in the Lactating Mammary Gland: Insights from Transcriptomics Analyses **2012**,		21
29	Fine metabolic regulation in ruminants via nutrient-gene interactions: saturated long-chain fatty acids increase expression of genes involved in lipid metabolism and immune response partly through PPAR-activation. *British Journal of Nutrition*, **2012**, 107, 179-91	3.6	63
28	Systems Biology and Animal Nutrition: Insights from the Dairy Cow during Growth and the Lactation Cycle **2011**, 215-245		6
27	Strategies for regeneration of the bone using porcine adult adipose-derived mesenchymal stem cells. *Theriogenology*, **2011**, 75, 1381-99	2.8	64
26	Mammary Gland | Gene Networks Controlling Development and Involution **2011**, 346-351		1
25	Functional adaptations of the transcriptome to mastitis-causing pathogens: the mammary gland and beyond. *Journal of Mammary Gland Biology and Neoplasia*, **2011**, 16, 305-22	2.4	41
24	Gene networks driving bovine mammary protein synthesis during the lactation cycle. *Bioinformatics and Biology Insights*, **2011**, 5, 83-98	5.3	193
23	Adipose tissue depots of Holstein cows are immune responsive: inflammatory gene expression in vitro. *Domestic Animal Endocrinology*, **2010**, 38, 168-78	2.3	43
22	Effects of the peroxisome proliferator-activated receptor-alpha agonists clofibrate and fish oil on hepatic fatty acid metabolism in weaned dairy calves. *Journal of Dairy Science*, **2010**, 93, 2404-18	4	24
21	Selection and reliability of internal reference genes for quantitative PCR verification of transcriptomics during the differentiation process of porcine adult mesenchymal stem cells. *Stem Cell Research and Therapy*, **2010**, 1, 7	8.3	21
20	Functional and gene network analyses of transcriptional signatures characterizing pre-weaned bovine mammary parenchyma or fat pad uncovered novel inter-tissue signaling networks during development. *BMC Genomics*, **2010**, 11, 331	4.5	24
19	Adipogenic and energy metabolism gene networks in longissimus lumborum during rapid post-weaning growth in Angus and Angus x Simmental cattle fed high-starch or low-starch diets. *BMC Genomics*, **2009**, 10, 142	4.5	89
18	Gene network and pathway analysis of bovine mammary tissue challenged with Streptococcus uberis reveals induction of cell proliferation and inhibition of PPARgamma signaling as potential mechanism for the negative relationships between immune response and lipid metabolism. *BMC Genomics*, **2009**, 10, 542	4.5	78
17	Identification of internal control genes for quantitative polymerase chain reaction in mammary tissue of lactating cows receiving lipid supplements. *Journal of Dairy Science*, **2009**, 92, 2007-19	4	75
16	Long-chain fatty acid effects on peroxisome proliferator-activated receptor-alpha-regulated genes in Madin-Darby bovine kidney cells: optimization of culture conditions using palmitate. *Journal of Dairy Science*, **2009**, 92, 2027-37	4	34
15	Peroxisome proliferator-activated receptor-gamma activation and long-chain fatty acids alter lipogenic gene networks in bovine mammary epithelial cells to various extents. *Journal of Dairy Science*, **2009**, 92, 4276-89	4	213

14	Morphological and Transcriptomic Comparison of Adipose and Bone Marrow Derived Porcine Stem Cells. *The Open Tissue Engineering and Regenerative Medicine Journal*, **2009**, 2, 20-33		17
13	Gene networks driving bovine milk fat synthesis during the lactation cycle. *BMC Genomics*, **2008**, 9, 366	4.5	499
12	Characterization of Madin-Darby bovine kidney cell line for peroxisome proliferator-activated receptors: temporal response and sensitivity to fatty acids. *Journal of Dairy Science*, **2008**, 91, 2808-13	4	31
11	Effects of inflammatory conditions on liver activity in puerperium period and consequences for performance in dairy cows. *Journal of Dairy Science*, **2008**, 91, 3300-10	4	273
10	Internal controls for quantitative polymerase chain reaction of swine mammary glands during pregnancy and lactation. *Journal of Dairy Science*, **2008**, 91, 3057-66	4	33
9	Gene expression ratio stability evaluation in prepubertal bovine mammary tissue from calves fed different milk replacers reveals novel internal controls for quantitative polymerase chain reaction. *Journal of Nutrition*, **2008**, 138, 1158-64	4.1	31
8	ACSL1, AGPAT6, FABP3, LPIN1, and SLC27A6 are the most abundant isoforms in bovine mammary tissue and their expression is affected by stage of lactation. *Journal of Nutrition*, **2008**, 138, 1019-24	4.1	157
7	Identification of reference genes for quantitative real-time PCR in the bovine mammary gland during the lactation cycle. *Physiological Genomics*, **2007**, 29, 312-9	3.6	237
6	Nutrition-induced ketosis alters metabolic and signaling gene networks in liver of periparturient dairy cows. *Physiological Genomics*, **2007**, 32, 105-16	3.6	243
5	Plasma paraoxonase, health, inflammatory conditions, and liver function in transition dairy cows. *Journal of Dairy Science*, **2007**, 90, 1740-50	4	272
4	LPIN1-, PPAR-, and SREBF-responsive gene networks regulate mammary lipid synthesis during diet-induced milk fat depression. *FASEB Journal*, **2007**, 21, A1106	0.9	2
3	Diets during far-off and close-up dry periods affect periparturient metabolism and lactation in multiparous cows. *Journal of Dairy Science*, **2006**, 89, 3563-77	4	170
2	The management of intensive dairy farms can be improved for better welfare and milk yield. *Livestock Science*, **2006**, 103, 231-236	1.7	15
1	Plasma cortisol variations in dairy cows after some usual or unusual manipulations. *Italian Journal of Animal Science*, **2005**, 4, 200-202	2.2	7