Cornelia C Metges

List of Publications by Year
in descending order

73 papers	2,868 citations	172457 29 h-index	175258 52 g-index
73 all docs	73 docs citations	73 times ranked	3447 citing authors

#	Article	IF	Citations
1	Contribution of Microbial Amino Acids to Amino Acid Homeostasis of the Host. Journal of Nutrition, 2000, 130, 1857S-1864S.	2.9	304
2	Nutritional programming of gastrointestinal tract development. Is the pig a good model for man?. Nutrition Research Reviews, 2010, 23, 4-22.	4.1	259
3	Gas Chromatography/Combustion/Isotope Ratio Mass Spectrometric Comparison ofN-Acetyl-andN-Pivaloyl Amino Acid Esters to Measure15N Isotopic Abundances in Physiological Samples: A Pilot Study on Amino Acid Synthesis in the Upper Gastro-intestinal Tract of Minipigs. Journal of Mass Spectrometry, 1996, 31, 367-376.	1.6	154
4	Choice of dietary protein of vegetarians and omnivores is reflected in their hair protein13C and15N abundance. Rapid Communications in Mass Spectrometry, 2005, 19, 1392-1400.	1.5	139
5	Inulin Alters the Intestinal Microbiota and Short-Chain Fatty Acid Concentrations in Growing Pigs Regardless of Their Basal Diet. Journal of Nutrition, 2006, 136, 1198-1202.	2.9	128
6	Prenatal High Protein Exposure Decreases Energy Expenditure and Increases Adiposity in Young Rats. Journal of Nutrition, 2002, 132, 142-144.	2.9	105
7	Incorporation of urea and ammonia nitrogen into ileal and fecal microbial proteins and plasma free amino acids in normal men and ileostomates. American Journal of Clinical Nutrition, 1999, 70, 1046-1058.	4.7	94
8	Measurement of15N/14N Isotopic Composition in Individual Plasma Free Amino Acids of Human Adults at Natural Abundance by Gas Chromatographyâ€“Combustion Isotope Ratio Mass Spectrometry. Analytical Biochemistry, 1997, 247, 158-164.	2.4	93
9	Kinetics of <scp>l</scp>-[1-¹³C]leucine when ingested with free amino acids, unlabeled or intrinsically labeled casein. American Journal of Physiology - Endocrinology and Metabolism, 2000, 278, E1000-E1009.	3.5	86
10	Whole-Body Nitrogen and Splanchnic Amino Acid Metabolism Differ in Rats Fed Mixed Diets Containing Casein or Its Corresponding Amino Acid Mixture. Journal of Nutrition, 2001, 131, 1965-1972.	2.9	79
11	Limited and excess protein intake of pregnant gilts differently affects body composition and cellularity of skeletal muscle and subcutaneous adipose tissue of newborn and weanling piglets. European Journal of Nutrition, 2012, 51, 151-165.	3.9	78
12	Involvement of Skeletal Muscle Protein, Glycogen, and Fat Metabolism in the Adaptation on Early Lactation of Dairy Cows. Journal of Proteome Research, 2011, 10, 4252-4262.	3.7	73
13	Maternal dietary protein restriction and excess affects offspring gene expression and methylation of non-SMC subunits of condensin I in liver and skeletal muscle. Epigenetics, 2012, 7, 239-252.	2.7	63
14	Effects of dietary energy intake during gestation and lactation on milk yield and composition of first, second and fourth parity sows. Archives of Animal Nutrition, 2007, 61, 452-468.	1.8	60
15	Proteome analysis of fatty liver in feed-deprived dairy cows reveals interaction of fuel sensing, calcium, fatty acid, and glycogen metabolism. Physiological Genomics, 2009, 37, 88-98.	2.3	57
16	Intestinal Glucose Absorption but Not Endogenous Glucose Production Differs between Colostrum- and Formula-Fed Neonatal Calves. Journal of Nutrition, 2011, 141, 48-55.	2.9	52
17	Availability of intestinal microbial lysine for whole body lysine homeostasis in human subjects. American Journal of Physiology - Endocrinology and Metabolism, 1999, 277, E597-E607.	3.5	50
18	13C Gas Chromatographyâ€“Combustion Isotope Ratio Mass Spectrometry Analysis of N-Pivaloyl Amino Acid Esters of Tissue and Plasma Samples. Analytical Biochemistry, 2000, 278, 156-164.	2.4	46

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19	Low and High Dietary Protein:Carbohydrate Ratios during Pregnancy Affect Materno-Fetal Glucose Metabolism in Pigs. Journal of Nutrition, 2014, 144, 155-163.	2.9	44
20	Early Nutrition and Later Obesity: Animal Models Provide Insights into Mechanisms. Advances in Experimental Medicine and Biology, 2009, 646, 105-112.	1.6	44
21	Supplementation of conjugated linoleic acid in dairy cows reduces endogenous glucose production during early lactation. Journal of Dairy Science, 2013, 96, 2258-2270.	3.4	43
22	Effect of a highâ€protein diet on food intake and liver metabolism during pregnancy, lactation and after weaning in mice. Proteomics, 2010, 10, 2573-2588.	2.2	40
23	Dietary protein restriction and excess of pregnant German Landrace sows induce changes in hepatic gene expression and promoter methylation of key metabolic genes in the offspring. Journal of Nutritional Biochemistry, 2013, 24, 484-495.	4.2	37
24	Effect of inulin supplementation on selected gastric, duodenal, and caecal microbiota and short chain fatty acid pattern in growing piglets. Archives of Animal Nutrition, 2007, 61, 235-246.	1.8	36
25	Proteomics analysis of hypothalamic response to energy restriction in dairy cows. Proteomics, 2007, 7, 3602-3617.	2.2	36
26	Higher body fatness in intrauterine growth retarded juvenile pigs is associated with lower fat and higher carbohydrate oxidation during ad libitum and restricted feeding. European Journal of Nutrition, 2014, 53, 583-597.	3.9	35
27	Intrauterine Growth Retarded Progeny of Pregnant Sows Fed High Protein:Low Carbohydrate Diet Is Related to Metabolic Energy Deficit. PLoS ONE, 2012, 7, e31390.	2.5	33
28	High and Low Proteinâ¶ Carbohydrate Dietary Ratios during Gestation Alter Maternal-Fetal Cortisol Regulation in Pigs. PLoS ONE, 2012, 7, e52748.	2.5	32
29	Effects of inadequate maternal dietary protein:carbohydrate ratios during pregnancy on offspring immunity in pigs. BMC Veterinary Research, 2012, 8, 232.	1.9	30
30	Synthesis and absorption of intestinal microbial lysine in humans and non-ruminant animals and impact on human estimated average requirement of dietary lysine. Current Opinion in Clinical Nutrition and Metabolic Care, 2006, 9, 37-41.	2.5	29
31	Growth efficiency, intestinal biology, and nutrient utilization and requirements of black soldier fly (Hermetia illucens) larvae compared to monogastric livestock species: a review. Journal of Animal Science and Biotechnology, 2022, 13, 31.	5.3	29
32	Effects of rutin and buckwheat seeds on energy metabolism and methane production in dairy cows. Journal of Dairy Science, 2016, 99, 2161-2168.	3.4	27
33	Somatic cytochrome c (CYCS) gene expression and promoter-specific DNA methylation in a porcine model of prenatal exposure to maternal dietary protein excess and restriction. British Journal of Nutrition, 2012, 107, 791-799.	2.3	24
34	Oxoproline kinetics and oxoproline urinary excretion during glycine- or sulfur amino acid-free diets in humans. American Journal of Physiology - Endocrinology and Metabolism, 2000, 278, E868-E876.	3.5	23
35	Contribution of intestinal microbial lysine to lysine homeostasis is reduced in minipigs fed a wheat glutenâ€“based diet. American Journal of Clinical Nutrition, 2002, 76, 1317-1325.	4.7	23
36	Effects of a 6-wk intraduodenal supplementation with quercetin on energy metabolism and indicators of liver damage in periparturient dairy cows. Journal of Dairy Science, 2015, 98, 4509-4520.	3.4	22

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37	Resistance and tolerance to mixed nematode infections in relation to performance level in laying hens. Veterinary Parasitology, 2019, 275, 108925.	1.8	22
38	Systemic Absorption of Catechins after Intraruminal or Intraduodenal Application of a Green Tea Extract in Cows. PLoS ONE, 2016, 11, e0159428.	2.5	21
39	cis-9,trans-11 and trans-10,cis-12 CLA affect lipid metabolism differently in primary white and brown adipocytes of djungarian hamsters. Lipids, 2003, 38, 1133-1142.	1.7	19
40	High-proteinâ€“low-carbohydrate diet during pregnancy alters maternal plasma amino acid concentration and placental amino acid extraction but not fetal plasma amino acids in pigs. British Journal of Nutrition, 2012, 108, 2176-2189.	2.3	18
41	Utilization of essential amino acids synthesized in the intestinal microbiota of monogastric mammals. British Journal of Nutrition, 2005, 94, 621-622.	2.3	17
42	A High Protein Diet during Pregnancy Affects Hepatic Gene Expression of Energy Sensing Pathways along Ontogenesis in a Porcine Model. PLoS ONE, 2011, 6, e21691.	2.5	17
43	Enrichment of selected serum fatty acids after a small oral dosage of (1-13C)- and (8-13C)triolein in human volunteers analysed by gas chromatography/combustion isotope ratio mass spectrometry. Biological Mass Spectrometry, 1994, 23, 295-301.	0.5	16
44	A low protein diet during pregnancy provokes a lasting shift of hepatic expression of genes related to cell cycle throughout ontogenesis in a porcine model. BMC Genomics, 2012, 13, 93.	2.8	16
45	Effects on Transcriptional Regulation and Lipid Droplet Characteristics in the Liver of Female Juvenile Pigs after Early Postnatal Feed Restriction and Refeeding Are Dependent on Birth Weight. PLoS ONE, 2013, 8, e76705.	2.5	16
46	Proteome and radioimmunoassay analyses of pituitary hormones and proteins in response to feed restriction of dairy cows. Proteomics, 2010, 10, 4491-4500.	2.2	15
47	Co-expulsion of Ascaridia galli and Heterakis gallinarum by chickens. International Journal for Parasitology, 2018, 48, 1003-1016.	3.1	14
48	Methane prediction based on individual or groups of milk fatty acids for dairy cows fed rations with or without linseed. Journal of Dairy Science, 2019, 102, 1788-1802.	3.4	14
49	Hepatic expression of the GH/JAK/STAT/IGF pathway, acute-phase response signalling and complement system are affected in mouse offspring by prenatal and early postnatal exposure to maternal high-protein diet. European Journal of Nutrition, 2011, 50, 611-623.	3.9	13
50	Influence of maternal low protein diet during pregnancy on hepatic gene expression signature in juvenile female porcine offspring. Molecular Nutrition and Food Research, 2013, 57, 277-290.	3.3	13
51	Effects of Oral Glutamine Supplementation on Early Postnatal Muscle Morphology in Low and Normal Birth Weight Piglets. Animals, 2020, 10, 1976.	2.3	11
52	Stable production of cyanophycinase in Nicotiana benthamiana and its functionality to hydrolyse cyanophycin in the murine intestine. Plant Biotechnology Journal, 2017, 15, 605-613.	8.3	10
53	Milk fatty acids estimated by mid-infrared spectroscopy and milk yield can predict methane emissions in dairy cows. Agronomy for Sustainable Development, 2018, 38, 1.	5.3	10
54	Phenotype Selection Reveals Coevolution of Muscle Glycogen and Protein and PTEN as a Gate Keeper for the Accretion of Muscle Mass in Adult Female Mice. PLoS ONE, 2012, 7, e39711.	2.5	9

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55	Resistance and tolerance to mixed nematode infections in chicken genotypes with extremely different growth rates. International Journal for Parasitology, 2019, 49, 579-591.	3.1	8
56	Classical and post-genomic methods to study GIT function with emphasis on the pig. Livestock Science, 2010, 133, 10-19.	1.6	7
57	Enhanced sensitivity of skeletal muscle growth in offspring of mice long-term selected for high body mass in response to a maternal high-protein/low-carbohydrate diet during lactation. European Journal of Nutrition, 2013, 52, 1201-1213.	3.9	7
58	Early postnatal feed restriction reduces liver connective tissue levels and affects H3K9 acetylation state of regulated genes associated with protein metabolism in low birth weight pigs. Journal of Nutritional Biochemistry, 2016, 29, 41-55.	4.2	7
59	Substitution of Dietary Sulfur Amino Acids by DL-2-hydroxy-4-Methylthiobutyric Acid Increases Remethylation and Decreases Transsulfuration in Weaned Piglets. Journal of Nutrition, 2019, 149, 432-440.	2.9	7
60	Low-abundance plasma and urinary [15N]urea enrichments analyzed by gas chromatography/combustion/isotope ratio mass spectrometry. Journal of Mass Spectrometry, 2002, 37, 489-494.	1.6	6
61	Substitution of Dietary Sulfur Amino Acids by á´…ÊŸ-2-Hydroxy-4-Methylthiobutyric Acid Reduces Fractional Glutathione Synthesis in Weaned Piglets. Journal of Nutrition, 2020, 150, 722-729.	2.9	6
62	Glutamine supplementation moderately affects growth, plasma metabolite and free amino acid patterns in neonatal low birth weight piglets. British Journal of Nutrition, 2022, 128, 2330-2340.	2.3	6
63	Effects of oral glutamine supplementation on jejunal morphology, development, and amino acid profiles in male low birth weight suckling piglets. PLoS ONE, 2022, 17, e0267357.	2.5	6
64	Maternal high-protein diet during pregnancy, but not during suckling, induced altered expression of an increasing number of hepatic genes in adult mouse offspring. European Journal of Nutrition, 2016, 55, 917-930.	3.9	5
65	Protein value of diets for dairy cows with different proportions of crude protein originating from red clover silage versus soybean meal. Animal Feed Science and Technology, 2018, 245, 126-135.	2.2	5
66	Glutamine supplementation stimulates cell proliferation in skeletal muscle and cultivated myogenic cells of low birth weight piglets. Scientific Reports, 2021, 11, 13432.	3.3	5
67	Distinct Roles of Perilipins in the Intramuscular Deposition of Lipids in Glutamine-Supplemented, Low-, and Normal-Birth-Weight Piglets. Frontiers in Veterinary Science, 2021, 8, 633898.	2.2	5
68	Breath water-based doubly labelled water method for the noninvasive determination of CO₂production and energy expenditure in mice. Isotopes in Environmental and Health Studies, 2018, 54, 561-572.	1.0	4
69	Transcript profile of skeletal muscle lipid metabolism genes affected by diet in a piglet model of low birth weight. PLoS ONE, 2019, 14, e0224484.	2.5	2
70	Kinetics of Physiological and Behavioural Responses in Endotoxemic Pigs with or without Dexamethasone Treatment. International Journal of Molecular Sciences, 2019, 20, 1393.	4.1	2
71	Diets for Dairy Cows with Different Proportions of Crude Protein Originating from Red Clover Silage versus Soybean Meal: Ruminal Degradation and Intestinal Digestibility of Amino Acids. Animals, 2021, 11, 2177.	2.3	1
72	The Effect of Dietary Protein Imbalance during Pregnancy on the Growth, Metabolism and Circulatory Metabolome of Neonatal and Weaned Juvenile Porcine Offspring. Nutrients, 2021, 13, 3286.	4.1	1

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73	Differentially Expressed Gene Patterns in Ascarid-Infected Chickens of Higher- or Lower-Performing Genotypes. Animals, 2021, 11, 1002.	2.3	0