Imke J M De Boer

List of Publications by Year
in descending order

131 papers	8,708 citations	41323 49 h-index	48277 88 g-index
132 all docs	132 docs citations	132 times ranked	7875 citing authors

#	Article	IF	Citations
1	Comparing environmental impacts for livestock products: A review of life cycle assessments. Livestock Science, 2010, 128, 1-11.	0.6	876
2	Environmental Impact of the Production of Mealworms as a Protein Source for Humans â€“ A Life Cycle Assessment. PLoS ONE, 2012, 7, e51145.	1.1	542
3	Life cycle assessment of conventional and organic milk production in the Netherlands. Agricultural Systems, 2008, 96, 95-107.	3.2	315
4	Innovation can accelerate the transition towards a sustainable food system. Nature Food, 2020, 1, 266-272.	6.2	285
5	Environmental impact assessment of conventional and organic milk production. Livestock Science, 2003, 80, 69-77.	1.2	244
6	Livestock and the Environment: What Have We Learned in the Past Decade?. Annual Review of Environment and Resources, 2015, 40, 177-202.	5.6	223
7	Defining a land boundary for sustainable livestock consumption. Global Change Biology, 2018, 24, 4185-4194.	4.2	205
8	The potential of future foods for sustainable and healthy diets. Nature Sustainability, 2018, 1, 782-789.	11.5	197
9	Assessing sustainability at farm-level: Lessons learned from a comparison of tools in practice. Ecological Indicators, 2016, 66, 391-404.	2.6	182
10	Nitrogen emissions along global livestock supply chains. Nature Food, 2020, 1, 437-446.	6.2	160
11	Global food supply: land use efficiency of livestock systems. International Journal of Life Cycle Assessment, 2016, 21, 747-758.	2.2	156
12	Comparing environmental consequences of anaerobic mono- and co-digestion of pig manure to produce bio-energy â€“ A life cycle perspective. Bioresource Technology, 2012, 125, 239-248.	4.8	147
13	The role of farm animals in a circular food system. Global Food Security, 2019, 21, 18-22.	4.0	141
14	Relating life cycle assessment indicators to gross value added for Dutch dairy farms. Ecological Economics, 2009, 68, 2278-2284.	2.9	134
15	Principles, drivers and opportunities of a circular bioeconomy. Nature Food, 2021, 2, 561-566.	6.2	129
16	Environmental assessment tools for the evaluation and improvement of European livestock production systems. Livestock Science, 2005, 96, 33-50.	1.2	120
17	Evaluation of indicators to assess the environmental impact of dairy production systems. Agriculture, Ecosystems and Environment, 2005, 111, 185-199.	2.5	113
18	Environmental consequences of processing manure to produce mineral fertilizer and bio-energy. Journal of Environmental Management, 2012, 102, 173-183.	3.8	110

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19	From environmental nuisance to environmental opportunity: housefly larvae convert waste to livestock feed. Journal of Cleaner Production, 2015, 102, 362-369.	4.6	109
20	Saving land to feed a growing population: consequences for consumption of crop and livestock products. International Journal of Life Cycle Assessment, 2016, 21, 677-687.	2.2	108
21	Accounting for multi-functionality of sheep farming in the carbon footprint of lamb: A comparison of three contrasting Mediterranean systems. Agricultural Systems, 2013, 116, 60-68.	3.2	101
22	Methods for uncertainty propagation in life cycle assessment. Environmental Modelling and Software, 2014, 62, 316-325.	1.9	101
23	Greenhouse gas mitigation in animal production: towards an integrated life cycle sustainability assessment. Current Opinion in Environmental Sustainability, 2011, 3, 423-431.	3.1	97
24	Methods for global sensitivity analysis in life cycle assessment. International Journal of Life Cycle Assessment, 2017, 22, 1125-1137.	2.2	97
25	An LP-model to analyse economic and ecological sustainability on Dutch dairy farms: model presentation and application for experimental farm â€œde Markeâ€• Agricultural Systems, 2004, 82, 139-160.	3.2	96
26	Food Access Deficiencies in Sub-saharan Africa: Prevalence and Implications for Agricultural Interventions. Frontiers in Sustainable Food Systems, 2019, 3, .	1.8	85
27	Invited review: Associations between variables of routine herd data and dairy cattle welfare indicators. Journal of Dairy Science, 2011, 94, 3213-3228.	1.4	84
28	Housing and management factors associated with indicators of dairy cattle welfare. Preventive Veterinary Medicine, 2015, 118, 80-92.	0.7	83
29	When experts disagree: the need to rethink indicator selection for assessing sustainability of agriculture. Environment, Development and Sustainability, 2017, 19, 1327-1342.	2.7	82
30	Genetic evaluation methods for populations with dominance and inbreeding. Theoretical and Applied Genetics, 1993, 86-86, 245-258.	1.8	77
31	Handling multi-functionality of livestock in a life cycle assessment: the case of smallholder dairying in Kenya. Current Opinion in Environmental Sustainability, 2014, 8, 29-38.	3.1	76
32	The effect of nutritional quality on comparing environmental impacts of human diets. Journal of Cleaner Production, 2014, 73, 88-99.	4.6	74
33	Eco-efficiency in the production chain of Dutch semi-hard cheese. Livestock Science, 2011, 139, 91-99.	0.6	73
34	Evaluating results of the Welfare Quality multi-criteria evaluation model for classification of dairy cattle welfare at the herd level. Journal of Dairy Science, 2013, 96, 6264-6273.	1.4	68
35	On-farm quantification of sustainability indicators: an application to egg production systems. British Poultry Science, 2006, 47, 405-417.	0.8	66
36	Ecological and economic evaluation of Dutch egg production systems. Livestock Science, 2011, 139, 109-121.	0.6	66

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37	Inter- and intra-observer reliability of experienced and inexperienced observers for the Qualitative Behaviour Assessment in dairy cattle. Animal Welfare, 2012, 21, 307-318.	0.3	62
38	Assessing environmental impacts associated with freshwater consumption along the life cycle of animal products: the case of Dutch milk production in Noord-Brabant. International Journal of Life Cycle Assessment, 2013, 18, 193-203.	2.2	62
39	Sustainability assessment of agricultural systems: The validity of expert opinion and robustness of a multi-criteria analysis. Agricultural Systems, 2017, 157, 118-128.	3.2	61
40	Bioconversion efficiencies, greenhouse gas and ammonia emissions during black soldier fly rearing â€“ A mass balance approach. Journal of Cleaner Production, 2020, 271, 122488.	4.6	59
41	Benchmarking the economic, environmental and societal performance of Dutch dairy farms aiming at internal recycling of nutrients. Journal of Cleaner Production, 2014, 73, 245-252.	4.6	58
42	Nutrient use efficiency: a valuable approach to benchmark the sustainability of nutrient use in global livestock production?. Current Opinion in Environmental Sustainability, 2014, 9-10, 122-130.	3.1	57
43	Evaluation of the environmental, economic, and social performance of soybean farming systems in southern Brazil. Journal of Cleaner Production, 2017, 142, 385-394.	4.6	57
44	Energy demand on dairy farms in Ireland. Journal of Dairy Science, 2013, 96, 6489-6498.	1.4	56
45	Carbon footprint of five pig diets using three land use change accounting methods. Livestock Science, 2012, 149, 215-223.	0.6	55
46	Exploring the value of routinely collected herd data for estimating dairy cattle welfare. Journal of Dairy Science, 2014, 97, 715-730.	1.4	52
47	Environmental Comparison of Biobased Chemicals from Glutamic Acid with Their Petrochemical Equivalents. Environmental Science & Technology, 2011, 45, 8521-8528.	4.6	51
48	Exploring variation in economic, environmental and societal performance among Dutch fattening pig farms. Livestock Science, 2012, 149, 143-154.	0.6	50
49	Modelling worker physical health and societal sustainability at farm level: An application to conventional and organic dairy farming. Agricultural Systems, 2007, 94, 205-219.	3.2	48
50	Prediction of additive and dominance effects in selected or unselected populations with inbreeding. Theoretical and Applied Genetics, 1992, 84-84, 451-459.	1.8	46
51	Evaluation of a feeding strategy to reduce greenhouse gas emissions from dairy farming: The level of analysis matters. Agricultural Systems, 2013, 121, 9-22.	3.2	46
52	Black soldier fly reared on pig manure: Bioconversion efficiencies, nutrients in the residual material, greenhouse gas and ammonia emissions. Waste Management, 2021, 126, 674-683.	3.7	46
53	Cost-effectiveness of feeding strategies to reduce greenhouse gas emissions from dairy farming. Journal of Dairy Science, 2014, 97, 2427-2439.	1.4	44
54	A comprehensive framework to assess the sustainability of nutrient use in global livestock supply chains. Journal of Cleaner Production, 2016, 129, 647-658.	4.6	44

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55	Circularity in animal production requires a change in the EAT-Lancet diet in Europe. Nature Food, 2022, 3, 66-73.	6.2	44
56	Economic, ecological, and social performance of conventional and organic broiler production in the Netherlands. British Poultry Science, 2009, 50, 546-557.	0.8	42
57	The Need and Potential of Biosensors to Detect Dioxins and Dioxin-Like Polychlorinated Biphenyls along the Milk, Eggs and Meat Food Chain. Sensors, 2011, 11, 11692-11716.	2.1	42
58	Exploring variability in methods and data sensitivity in carbon footprints of feed ingredients. International Journal of Life Cycle Assessment, 2013, 18, 768-782.	2.2	42
59	The Choice of the Sustainability Assessment Tool Matters: Differences in Thematic Scope and Assessment Results. Ecological Economics, 2017, 136, 77-85.	2.9	42
60	Livestock Farming with Care: towards sustainable production of animal-source food. Njas - Wageningen Journal of Life Sciences, 2013, 66, 3-5.	7.9	41
61	Assessing environmental consequences of using co-products in animal feed. International Journal of Life Cycle Assessment, 2014, 19, 79-88.	2.2	40
62	Attributional versus consequential life cycle assessment and feed optimization: alternative protein sources in pig diets. International Journal of Life Cycle Assessment, 2018, 23, 1-11.	2.2	40
63	Life cycle assessment of food production in integrated agricultureâ€“aquaculture systems of the Mekong Delta. Livestock Science, 2011, 139, 80-90.	0.6	39
64	MAKING THE MOST OF IMPERFECT DATA: A CRITICAL EVALUATION OF STANDARD INFORMATION COLLECTED IN FARM HOUSEHOLD SURVEYS. Experimental Agriculture, 2019, 55, 230-250.	0.4	39
65	Factors affecting energy and nitrogen efficiency of dairy cows: A meta-analysis. Journal of Dairy Science, 2013, 96, 7245-7259.	1.4	37
66	The impact of uncertainties on predicted greenhouse gas emissions of dairy cow production systems. Journal of Cleaner Production, 2014, 73, 116-124.	4.6	37
67	Potential of life cycle assessment to support environmental decision making at commercial dairy farms. Agricultural Systems, 2014, 131, 105-115.	3.2	37
68	The carbon footprint of exported Brazilian yellow melon. Journal of Cleaner Production, 2013, 47, 404-414.	4.6	36
69	On-farm assessment of laying hen welfare: a comparison of one environment-based and two animal-based methods. Applied Animal Behaviour Science, 2005, 90, 277-291.	0.8	35
70	Effect of abandoning highland grazing on nutrient balances and economic performance of Italian Alpine dairy farms. Livestock Science, 2011, 139, 142-149.	0.6	35
71	Assessing the Sustainability Performance of Organic Farms in Denmark. Sustainability, 2016, 8, 957.	1.6	35
72	Metrics, models and foresight for European sustainable food and nutrition security: The vision of the SUSFANS project. Agricultural Systems, 2018, 163, 45-57.	3.2	35

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73	Environmental and economic performance of beef farming systems with different feeding strategies in southern Brazil. Agricultural Systems, 2016, 146, 70-79.	3.2	34
74	Assessment time of the Welfare Quality^{Â®}protocol for dairy cattle. Animal Welfare, 2013, 22, 85-93.	0.3	31
75	What do calves choose to eat and how do preferences affect behaviour?. Applied Animal Behaviour Science, 2014, 161, 7-19.	0.8	31
76	A mechanistic model for electricity consumption on dairy farms: Definition, validation, and demonstration. Journal of Dairy Science, 2014, 97, 4973-4984.	1.4	31
77	Assessing the impact of changes in the electricity price structure on dairy farm energy costs. Applied Energy, 2015, 137, 1-8.	5.1	30
78	Effects of Dutch livestock production on human health and the environment. Science of the Total Environment, 2020, 737, 139702.	3.9	30
79	A review of European models to assess the sustainability performance of livestock production systems. Agricultural Systems, 2020, 182, 102842.	3.2	30
80	Reducing greenhouse gas emissions of New Zealand beef through better integration of dairy and beef production. Agricultural Systems, 2021, 186, 102936.	3.2	30
81	Soil carbon sequestration in grazing systems: managing expectations. Climatic Change, 2020, 161, 385-391.	1.7	29
82	Chopped or Long Roughage: What Do Calves Prefer? Using Cross Point Analysis of Double Demand Functions. PLoS ONE, 2014, 9, e88778.	1.1	27
83	Milk quality along dairy farming systems and associated value chains in Kenya: An analysis of composition, contamination and adulteration. Food Control, 2021, 119, 107482.	2.8	26
84	Methods to determine the relative value of genetic traits in dairy cows to reduce greenhouse gas emissions along the chain. Journal of Dairy Science, 2014, 97, 5191-5205.	1.4	25
85	Economic and environmental evaluation of three goal-vision based scenarios for organic dairy farming in Denmark. Agricultural Systems, 2011, 104, 315-325.	3.2	23
86	A framework for quantitative analysis of livestock systems using theoretical concepts of production ecology. Agricultural Systems, 2015, 139, 100-109.	3.2	23
87	Sustainability evaluation of automatic and conventional milking systems on organic dairy farms in Denmark. Njas - Wageningen Journal of Life Sciences, 2012, 59, 25-33.	7.9	22
88	Behavioural adaptation to a short or no dry period with associated management in dairy cows. Applied Animal Behaviour Science, 2017, 186, 7-15.	0.8	22
89	How social factors and behavioural strategies affect feeding and social interaction patterns in pigs. Physiology and Behavior, 2018, 194, 23-40.	1.0	22
90	Assessing broad life cycle impacts of daily onboard decision-making, annual strategic planning, and fisheries management in a northeast Atlantic trawl fishery. International Journal of Life Cycle Assessment, 2018, 23, 1357-1367.	2.2	21

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91	Emissions of ammonia, nitrous oxide, and methane from aviaries with organic laying hen husbandry. Biosystems Engineering, 2011, 110, 123-133.	1.9	20
92	The importance of hormonal circadian rhythms in daily feeding patterns: An illustration with simulated pigs. Hormones and Behavior, 2017, 93, 82-93.	1.0	20
93	Visual soil evaluation: reproducibility and correlation with standard measurements. Soil and Tillage Research, 2018, 178, 167-178.	2.6	20
94	Nitrogen flows in global pork supply chains and potential improvement from feeding swill to pigs. Resources, Conservation and Recycling, 2019, 146, 168-179.	5.3	20
95	Land reform in South Africa: Beneficiary participation and impact on land use in the Waterberg District. Njas - Wageningen Journal of Life Sciences, 2017, 83, 57-66.	7.9	19
96	Assessing greenhouse gas emissions of milk production: which parameters are essential?. International Journal of Life Cycle Assessment, 2017, 22, 441-455.	2.2	19
97	Assessing dairy cow welfare during the grazing and housing periods on spring-calving, pasture-based dairy farms. Journal of Animal Science, 2021, 99, .	0.2	19
98	Freshwater use in livestock productionâ€"To be used for food crops or livestock feed?. Agricultural Systems, 2017, 155, 1-8.	3.2	18
99	Land use efficiency of beef systems in the Northeastern USA from a food supply perspective. Agricultural Systems, 2017, 156, 34-42.	3.2	17
100	Humanâ€"dog interactions and behavioural responses of village dogs in coastal villages in MichoacÃ¡n, Mexico. Applied Animal Behaviour Science, 2014, 154, 57-65.	0.8	16
101	Reducing the impact of irrigated crops on freshwater availability: the case of Brazilian yellow melons. International Journal of Life Cycle Assessment, 2014, 19, 437-448.	2.2	15
102	Understanding feeding patterns in growing pigs by modelling growth and motivation. Applied Animal Behaviour Science, 2015, 171, 69-80.	0.8	15
103	The relevance of spatial scales in nutrient balances on dairy farms. Agriculture, Ecosystems and Environment, 2019, 269, 125-139.	2.5	15
104	Pre-weaning management of calves on commercial dairy farms and its influence on calf welfare and mortality. Animal, 2020, 14, 2580-2587.	1.3	15
105	The compatibility of circularity and national dietary recommendations for animal products in five European countries: a modelling analysis on nutritional feasibility, climate impact, and land use. Lancet Planetary Health, The, 2022, 6, e475-e483.	5.1	15
106	Black soldier fly larvae show a stronger preference for manure than for a massâ€rearing diet. Journal of Applied Entomology, 2020, 144, 560-565.	0.8	14
107	Associating mobility scores with production and reproductive performance in pasture-based dairy cows. Journal of Dairy Science, 2020, 103, 9238-9249.	1.4	14
108	Total loss and distribution of nitrogen and phosphorus in the outdoor run of organic laying hens. British Poultry Science, 2012, 53, 731-740.	0.8	12

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109	Life Cycle Assessment of Segregating Fattening Pig Urine and Feces Compared to Conventional Liquid Manure Management. Environmental Science & Technology, 2013, 47, 130111145109006.	4.6	12
110	Identifying Sustainability Issues for Soymeal and Beef Production Chains. Journal of Agricultural and Environmental Ethics, 2014, 27, 949-965.	0.9	12
111	The effect of intensive grazing systems on the rising plate meter calibration for perennial ryegrass pastures. Journal of Dairy Science, 2019, 102, 10439-10450.	1.4	12
112	Agriculture in land reform farms: Impact on livelihoods of beneficiaries in the Waterberg district, South Africa. Land Use Policy, 2020, 97, 104710.	2.5	12
113	Effects of dry period length on production, cash flows and greenhouse gas emissions of the dairy herd: A dynamic stochastic simulation model. PLoS ONE, 2017, 12, e0187101.	1.1	11
114	Effect of origin and composition of diet on ecological impact of the organic egg production chain. Livestock Science, 2013, 151, 271-283.	0.6	10
115	Understanding roles and functions of cattle breeds for pastoralists in Benin. Livestock Science, 2018, 210, 129-136.	0.6	10
116	Pastoralists in a changing environment: The competition for grazing land in and around the W Biosphere Reserve, Benin Republic. Ambio, 2018, 47, 340-354.	2.8	10
117	Correcting fresh grass allowance for rejected patches due to excreta in intensive grazing systems for dairy cows. Journal of Dairy Science, 2019, 102, 10451-10459.	1.4	10
118	Understanding variability in greenhouse gas emission estimates of smallholder dairy farms in Indonesia. International Journal of Life Cycle Assessment, 2021, 26, 1160-1176.	2.2	10
119	Systems In Organic Dairy Production. Journal of Agricultural and Environmental Ethics, 2008, 21, 205-228.	0.9	9
120	Agent-based modelling in applied ethology: An exploratory case study of behavioural dynamics in tail biting in pigs. Applied Animal Behaviour Science, 2016, 183, 10-18.	0.8	8
121	Selective improvement of global datasets for the computation of locally relevant environmental indicators: A method based on global sensitivity analysis. Environmental Modelling and Software, 2017, 96, 58-67.	1.9	8
122	Market Share for Semen and Cloned Embryos in Dairy Herds. Journal of Dairy Science, 1994, 77, 3691-3703.	1.4	7
123	Unravelling variation in feeding, social interaction and growth patterns among pigs using an agent-based model. Physiology and Behavior, 2018, 191, 100-115.	1.0	6
124	Yield gap analysis in dairy production systems using the mechanistic model LiGAPS-Dairy. Journal of Dairy Science, 2021, 104, 5689-5704.	1.4	6
125	Manure as waste and food as feed: Environmental challenges on Chinese dairy farms. Resources, Conservation and Recycling, 2022, 181, 106233.	5.3	6
126	Deriving estimates of individual variability in genetic potentials of performance traits for 3 dairy breeds, using a model of lifetime nutrient partitioning. Journal of Dairy Science, 2015, 98, 618-632.	1.4	5

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127	Understanding transitions in farming systems and their effects on livestock rearing and smallholder livelihoods in Telangana, India. Ambio, 2021, 50, 1809-1823.	2.8	5
128	Consumer interest in social sustainability issues of whitefish from capture fisheries in the northâ€east Atlantic. Fish and Fisheries, 2017, 18, 527-542.	2.7	4
129	Effect of different cleaning procedures on water use and bacterial levels in weaner pig pens. PLoS ONE, 2020, 15, e0242495.	1.1	4
130	Yield gap analysis of feed-crop livestock systems: The case of grass-based beef production in France. Agricultural Systems, 2018, 159, 21-31.	3.2	3
131	Predicting nutrient excretion from dairy cows on smallholder farms in Indonesia using readily available farm data. Asian-Australasian Journal of Animal Sciences, 2020, 33, 2039-2049.	2.4	2