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List of Publications by Year
in descending order

Version: 2024-02-01

63 papers	655 citations	686830 13 h-index	713013 21 g-index
65 all docs	65 docs citations	65 times ranked	644 citing authors

#	Article	IF	Citations
1	Greenhouse gas formation during the ensiling process of grass and lucerne silage. Journal of Environmental Management, 2022, 304, 114142.	3.8	4
2	Assessment of ammonia sensors and photoacoustic measurement systems using a gas calibration unit. Computers and Electronics in Agriculture, 2022, 194, 106744.	3.7	2
3	Exploring animal genetic resources of the domestic chicken and their behavior in the open field. Journal of Applied Poultry Research, 2022, 31, 100237.	0.6	6
4	Locomotion behavior of dairy cows on traditional summer mountain farms in comparison with modern cubicleÂhousing without access to pasture. PLoS ONE, 2022, 17, e0264320.	1.1	1
5	Identification of airborne particles and fungus spores concentrations within horses stables. Atmospheric Pollution Research, 2021, 12, 93-103.	1.8	0
6	Corrigendum to: Optimisation of dry matter and nutrients in feed rations through use of a near-infrared spectroscopy system mounted on a self-propelled feed mixer. Animal Production Science, 2021, 61, 540.	0.6	1
7	Optimisation of dry matter and nutrients in feed rations through use of a near-infrared spectroscopy system mounted on a self-propelled feed mixer. Animal Production Science, 2021, 61, 514.	0.6	0
8	The Importance of Low Daily Risk for the Prediction of Treatment Events of Individual Dairy Cows with Sensor Systems. Sensors, 2021, 21, 1389.	2.1	7
9	Effects of a Partially Perforated Flooring System on Ammonia Emissions in Broiler Housingâ€"Conflict of Objectives between Animal Welfare and Environment?. Animals, 2021, 11, 707.	1.0	6
10	Heating performance of a laboratory pilot-plant combining heat exchanger and air scrubber for animal houses. Scientific Reports, 2021, 11, 6872.	1.6	2
11	Suitability of Different Thermometers for Measuring Body Core and Skin Temperatures in Suckling Piglets. Animals, 2021, 11, 1004.	1.0	7
12	Dual sensor measurement shows that temperature outperforms pH as an early sign of aerobic deterioration in maize silage. Scientific Reports, 2021, 11, 8686.	1.6	8
13	One-Time Acidification of Slurry: What Is the Most Effective Acid and Treatment Strategy?. Agronomy, 2021, 11, 1319.	1.3	18
14	Multi-sensor measurement of O2, CO2 and reheating in triticale silage: An extended approach from aerobic stability to aerobic microbial respiration. Biosystems Engineering, 2021, 207, 1-11.	1.9	4
15	A Multi-Sensor Mini-Bioreactor to Preselect Silage Inoculants by Tracking Metabolic Activity in situ During Fermentation. Frontiers in Microbiology, 2021, 12, 673795.	1.5	1
16	Heating Performance and Ammonia Removal of a Single-Stage Bioscrubber Pilot Plant with Integrated Heat Exchanger under Field Conditions. Energies, 2021, 14, 6484.	1.6	2
17	Determining Immunoglobulin Content of Bovine Colostrum and Factors Affecting the Outcome: A Review. Animals, 2021, 11, 3587.	1.0	16
18	Ad libitum feeding of sows with whole crop maize silageâ€"Effects on slurry parameters, technology and floor pollution. Animal Feed Science and Technology, 2020, 262, 114368.	1.1	8

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19	Feasibility Study on the Use of Infrared Thermography to Classify Fattening Pigs into Feeding Groups According Their Body Composition. Sensors, 2020, 20, 5221.	2.1	3
20	A new experimental setup for measuring greenhouse gas and volatile organic compound emissions of silage during the aerobic storage period in a special silage respiration chamber. Environmental Pollution, 2020, 267, 115513.	3.7	7
21	Using Sensor Data to Detect Lameness and Mastitis Treatment Events in Dairy Cows: A Comparison of Classification Models. Sensors, 2020, 20, 3863.	2.1	12
22	Effects of a slatted floor on bacteria and physical parameters in litter in broiler houses. Veterinary and Animal Science, 2020, 9, 100115.	0.6	12
23	Using Passive Infrared Detectors to Record Group Activity and Activity in Certain Focus Areas in Fattening Pigs. Animals, 2020, 10, 792.	1.0	17
24	Validation of a New Resource-Efficient Feeding System for Fattening Pigs Using Increased Crude Fiber Concentrations in Diets: Feed Intake and Ammonia Emissions. Animals, 2020, 10, 497.	1.0	5
25	Energy Efficiency of a Heat Pump System: Case Study in Two Pig Houses. Energies, 2020, 13, 662.	1.6	17
26	Pig barns ammonia and greenhouse gas emission mitigation by slurry aeration and acid scrubber. Environmental Science and Pollution Research, 2020, 27, 9444-9453.	2.7	15
27	Suitability of Different Filling Materials for a Biofilter at a Broiler Fattening Facility in Terms of Ammonia and Odour Reduction. Atmosphere, 2020, 11, 13.	1.0	8
28	Dynamics of Different Buffer Systems in Slurries Based on Time and Temperature of Storage and Their Visualization by a New Mathematical Tool. Animals, 2020, 10, 724.	1.0	8
29	Automated pressure regulation for a silage bagging machine. Computers and Electronics in Agriculture, 2020, 173, 105399.	3.7	3
30	Aeration of pig slurry affects ammonia and greenhouse gases emissions. International Journal of Environmental Science and Technology, 2019, 16, 7327-7338.	1.8	9
31	An automatic smart measurement system with signal decomposition to partition dual-source CO2 flux from maize silage. Sensors and Actuators B: Chemical, 2019, 300, 127053.	4.0	3
32	Feasibility Study: Improving Floor Cleanliness by Using a Robot Scraper in Group-Housed Pregnant Sows and Their Reactions on the New Device. Animals, 2019, 9, 185.	1.0	9
33	PSII-9 Body core and skin temperatures in suckling piglets measured by infrared thermography and thermometry methods. Journal of Animal Science, 2019, 97, 234-235.	0.2	1
34	The effect of different feeding regimes on horses' blocking and activity behavior at a concentrate feeding station for horses in group housing. Journal of Veterinary Behavior: Clinical Applications and Research, 2018, 24, 27-35.	0.5	4
35	Sources of nitrous oxide and other climate relevant gases on surface area in a dairy free stall barn with solid floor and outside slurry storage. Atmospheric Environment, 2018, 178, 41-48.	1.9	7
36	Cattle Diets Strongly Affect Nitrous Oxide in the Rumen. Sustainability, 2018, 10, 3679.	1.6	9

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37	Recording Heart Rate Variability of Dairy Cows to the Cloudâ€"Why Smartphones Provide Smart Solutions. Sensors, 2018, 18, 2541.	2.1	10
38	Evaluation of a dry filter for dust removal under laboratory conditions in comparison to practical use at a laying hen barn. Environmental Science and Pollution Research, 2018, 25, 29511-29517.	2.7	4
39	Using walking speed for lameness detection in lactating dairy cows. Livestock Science, 2018, 218, 119-123.	0.6	13
40	Quantification of Methane and Ammonia Emissions in a Naturally Ventilated Barn by Using Defined Criteria to Calculate Emission Rates. Animals, 2018, 8, 75.	1.0	25
41	The effect of a compressed air stimulus on blocking times in a concentrate feeding station for horses in group housing. Applied Animal Behaviour Science, 2017, 191, 39-48.	0.8	2
42	In situ measurements and simulation of oxygen diffusion and heat transfer in maize silage relative to the silo surface. Computers and Electronics in Agriculture, 2017, 137, 1-8.	3.7	8
43	CO2 production, dissolution and pressure dynamics during silage production: multi-sensor-based insight into parameter interactions. Scientific Reports, 2017, 7, 14721.	1.6	14
44	Evaluation of two indoor air pollution abatement techniques in forced-ventilation fattening pig barns. Atmospheric Pollution Research, 2017, 8, 428-438.	1.8	16
45	Effects of Biogas Substrate Recirculation on Methane Yield and Efficiency of a Liquid-Manure-Based Biogas Plant. Energies, 2017, 10, 325.	1.6	11
46	Effects of Three Different Additives and Two Different Bulk Densities on Maize Silage Characteristics, Temperature Profiles, CO2 and O2â€"Dynamics in Small Scale Silos during Aerobic Exposure. Applied Sciences (Switzerland), 2017, 7, 545.	1.3	11
47	An Assessment of Three Different In Situ Oxygen Sensors for Monitoring Silage Production and Storage. Sensors, 2016, 16, 91.	2.1	7
48	Developing a Penetrometer-Based Mapping System for Visualizing Silage Bulk Density from the Bunker Silo Face. Sensors, 2016, 16, 1038.	2.1	2
49	Methodological Comparison between a Novel Automatic Sampling System for Gas Chromatography versus Photoacoustic Spectroscopy for Measuring Greenhouse Gas Emissions under Field Conditions. Sensors, 2016, 16, 1638.	2.1	20
50	Support Vector machine and duration-aware conditional random field for identification of spatio-temporal activity patterns by combined indoor positioning and heart rate sensors. GeoInformatica, 2016, 20, 693-714.	2.0	9
51	Analysis of the dust emissions from a naturally ventilated turkey house using tracer gas method. Environmental Monitoring and Assessment, 2016, 188, 377.	1.3	5
52	Physical properties of particulate matter from animal housesâ€"empirical studies to improve emission modelling. Environmental Science and Pollution Research, 2016, 23, 12253-12263.	2.7	20
53	Mapping oxygen-induced temperature patterns of round bale silage based on 3D stepwise-profiling measurement. Measurement: Journal of the International Measurement Confederation, 2016, 82, 115-122.	2.5	5
54	The Role of Infrared Thermography as a Non-Invasive Tool for the Detection of Lameness in Cattle. Sensors, 2015, 15, 14513-14525.	2.1	49

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55	Tracking oxygen and temperature dynamics in maize silage-novel application of a Clark oxygen electrode. Biosystems Engineering, 2015, 139, 60-65.	1.9	11
56	Investigation of heating and cooling potential of a modular housing system for fattening pigs with integrated geothermal heat exchanger. Biosystems Engineering, 2014, 121, 118-129.	1.9	38
57	A comparison of emission calculations using different modeled indicators with 1-year online measurements. Environmental Monitoring and Assessment, 2013, 185, 9751-9762.	1.3	4
58	Comparative evaluation of equations predicting methane production of dairy cattle from feed characteristics. Archives of Animal Nutrition, 2013, 67, 279-288.	0.9	5
59	Electronic detection of lameness in dairy cows through measuring pedometric activity and lying behavior. Applied Animal Behaviour Science, 2012, 142, 134-141.	0.8	70
60	Image-based comparison between a Î³-ray scanner and a dual-sensor penetrometer technique for visual assessment of bale density distribution. Computers and Electronics in Agriculture, 2012, 82, 1-7.	3.7	10
61	A study to identify and correct friction-induced error of penetration measurement for agricultural materials. Measurement: Journal of the International Measurement Confederation, 2012, 45, 829-835.	2.5	7
62	Indoor air quality improvement from particle matters for laying hen poultry houses. Biosystems Engineering, 2011, 109, 22-36.	1.9	25
63	An improved penetrometer technique for determining bale density. Biosystems Engineering, 2010, 105, 273-277.	1.9	12