Marcella Guarino

List of Publications by Year
in descending order

67 papers	2,707 citations	147726 31 h-index	182361 51 g-index
70 all docs	70 docs citations	70 times ranked	2351 citing authors

#	Article	IF	Citations
1	The Potentialities of Machine Learning for Cow-Specific Milking: Automatically Setting Variables in Milking Machines. Animals, 2022, 12, 1614.	1.0	1
2	Evaluation of a Wet Acid Scrubber and Dry Filter Abatement Technologies in Pig Barns by Dynamic Olfactometry. Applied Sciences (Switzerland), 2021, 11, 3219.	1.3	4
3	Environmental sustainability assessment of poultry productions through life cycle approaches: A critical review. Trends in Food Science and Technology, 2021, 110, 201-212.	7.8	40
4	Comparison of ammonia air concentration before and during the spread of COVID-19 in Lombardy (Italy) using ground-based and satellite data. Atmospheric Environment, 2021, 259, 118534.	1.9	10
5	Ammonia concentration and recommended threshold values in pig farming: a review. , 2021, , .		1
6	Measurements techniques and models to assess odor annoyance: A review. Environment International, 2020, 134, 105261.	4.8	94
7	Describing the trend of ammonia, particulate matter and nitrogen oxides: The role of livestock activities in northern Italy during Covid-19 quarantine. Environmental Research, 2020, 191, 110048.	3.7	43
8	Improvement of human health and environmental costs in the European Union by air scrubbers in intensive pig farming. Journal of Cleaner Production, 2020, 275, 124007.	4.6	16
9	A Data-Driven Prediction Method for an Early Warning of Coccidiosis in Intensive Livestock Systems: A Preliminary Study. Animals, 2020, 10, 747.	1.0	15
10	A review on dairy cattle farming: Is precision livestock farming the compromise for an environmental, economic and social sustainable production?. Journal of Cleaner Production, 2020, 262, 121409.	4.6	121
11	Improving the Sustainability of Dairy Slurry by A Commercial Additive Treatment. Sustainability, 2019, 11, 4998.	1.6	9
12	Smart Animal Agriculture: Application of Real-Time Sensors to Improve Animal Well-Being and Production. Annual Review of Animal Biosciences, 2019, 7, 403-425.	3.6	166
13	Review: Environmental impact of livestock farming and Precision Livestock Farming as a mitigation strategy. Science of the Total Environment, 2019, 650, 2751-2760.	3.9	214
14	On-barn pig weight estimation based on body measurements by a Kinect v1 depth camera. Computers and Electronics in Agriculture, 2018, 148, 29-36.	3.7	116
15	A pilot study to detect coccidiosis in poultry farms at early stage from air analysis. Biosystems Engineering, 2018, 173, 64-70.	1.9	17
16	Milk production Life Cycle Assessment: A comparison between estimated and measured emission inventory for manure handling. Science of the Total Environment, 2018, 625, 209-219.	3.9	40
17	Technical note: Validation and comparison of 2 commercially available activity loggers. Journal of Dairy Science, 2018, 101, 5449-5453.	1.4	21
18	The influence of microclimate on the development of foot pad dermatitis in broilers. , 2018, , .		1

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19	Real-time monitoring of broiler flock's welfare status using camera-based technology. Biosystems Engineering, 2018, 173, 103-114.	1.9	45
20	A Feasibility Study on the Use of a Structured Light Depth-Camera for Three-Dimensional Body Measurements of Dairy Cows in Free-Stall Barns. Sensors, 2018, 18, 673.	2.1	78
21	Automatic cough detection for bovine respiratory disease in a calf house. Biosystems Engineering, 2018, 173, 45-56.	1.9	37
22	A critical review of the recent evolution of Life Cycle Assessment applied to milk production. Journal of Cleaner Production, 2017, 140, 421-435.	4.6	134
23	Application note: Labelling, a methodology to develop reliable algorithm in PLF. Computers and Electronics in Agriculture, 2017, 142, 424-428.	3.7	21
24	The effect of anaerobic digestion and storage on indicator microorganisms in swine and dairy manure. Environmental Science and Pollution Research, 2017, 24, 24135-24146.	2.7	29
25	Sound analysis to model weight of broiler chickens. Poultry Science, 2017, 96, 3938-3943.	1.5	29
26	A blueprint for developing and applying precision livestock farming tools: A key output of the EU-PLF project. Animal Frontiers, 2017, 7, 12-17.	0.8	26
27	Comparison among NH3 and GHGs emissive patterns from different housing solutions of dairy farms. Atmospheric Environment, 2016, 141, 60-66.	1.9	23
28	Early recognition of bovine respiratory disease in calves using automated continuous monitoring of cough sounds. Computers and Electronics in Agriculture, 2016, 129, 15-26.	3.7	52
29	Acoustic Analysis of Some Characteristics of Red Deer Roaring. Italian Journal of Animal Science, 2015, 14, 3773.	0.8	0
30	The influence on biogas production of three slurry-handling systems in dairy farms. Journal of Agricultural Engineering, 2015, 46, 30.	0.7	9
31	An innovative approach to predict the growth in intensive poultry farming. Computers and Electronics in Agriculture, 2015, 119, 178-183.	3.7	54
32	Discerning Pig Screams in Production Environments. PLoS ONE, 2015, 10, e0123111.	1.1	45
33	Image feature extraction for classification of aggressive interactions among pigs. Computers and Electronics in Agriculture, 2014, 104, 57-62.	3.7	103
34	Classification of aggressive behaviour in pigs by activity index and multilayer feed forward neural network. Biosystems Engineering, 2014, 119, 89-97.	1.9	70
35	Image-processing technique to measure pig activity in response to climatic variation in a pig barn. Animal Production Science, 2014, 54, 1075.	0.6	42
36	Acoustic-reward learning as a method to reduce the incidence of aggressive and abnormal behaviours among newly mixed piglets. Animal Production Science, 2014, 54, 1084.	0.6	2

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37	Effects of disinfectant fogging procedure on dust, ammonia concentration, aerobic bacteria and fungal spores in a farrowing-weaning room. Annals of Agricultural and Environmental Medicine, 2014, 21, 494-499.	0.5	14
38	Analysis of aggressive behaviours of pigs by automatic video recordings. Computers and Electronics in Agriculture, 2013, 99, 209-217.	3.7	45
39	Heat stress assessment by swine related vocalizations. Livestock Science, 2013, 151, 29-34.	0.6	21
40	The use of image analysis as a new approach to assess behaviour classification in a pig barn. Acta Veterinaria Brno, 2013, 82, 25-30.	0.2	23
41	The sound makes the difference: the utility of real time sound analysis for health monitoring in pigs. , 2013, , 407-418.		0
42	They have seen the light: 3D light distribution and effects of light intensity on animal welfare in swine husbandry. , 2013, , 441-452.		0
43	Labelling the Behaviour of Piglets and Activity Monitoring from Video as a Tool of Assessing Interest in Different Environmental Enrichments / Oznaczanie zachowania i monitorowanie aktywnoÅ›ci prosiÄ…t na podstawie zapisu wideo jako narzÄ™dzie oceny ich zainteresowania rÃ³Å¼nymi elementami wzbogacajÄ…cymi Å›rodowisko. Annals of Animal Science, 2013, 13, 611-621.	0.6	10
44	Yearly emission factors of ammonia and particulate matter from three laying-hen housing systems. Animal Production Science, 2012, 52, 1089.	0.6	26
45	Photocatalytic abatement of ammonia in nitrogen-containing effluents. Chemical Engineering Journal, 2012, 191, 394-401.	6.6	55
46	Effects of TiO2 based photocatalytic paint on concentrations and emissions of pollutants and on animal performance in a swine weaning unit. Journal of Environmental Management, 2012, 96, 86-90.	3.8	48
47	Cough sound description in relation to respiratory diseases in dairy calves. Preventive Veterinary Medicine, 2010, 96, 276-280.	0.7	37
48	PARTICULATE MATTER CONCENTRATION AND EMISSION FACTOR IN THREE DIFFERENT LAYING HEN HOUSING SYSTEMS. Journal of Agricultural Engineering, 2009, 40, 15.	0.7	5
49	Online detection of an emotional response of a horse during physical activity. Veterinary Journal, 2009, 181, 38-42.	0.6	25
50	The influence of respiratory disease on the energy envelope dynamics of pig cough sounds. Computers and Electronics in Agriculture, 2009, 69, 80-85.	3.7	16
51	Definition of yearly emission factor of dust and greenhouse gases through continuous measurements in swine husbandry. Atmospheric Environment, 2009, 43, 1548-1556.	1.9	47
52	Dust concentration variation in relation to animal activity in a pig barn. Biosystems Engineering, 2009, 104, 118-124.	1.9	39
53	Quantification of Three-Dimensional Light Distribution in Pig Houses. Transactions of the ASABE, 2009, 52, 1677-1682.	1.1	1
54	Photocatalytic TiO2 coatingâ€"to reduce ammonia and greenhouse gases concentration and emission from animal husbandries. Bioresource Technology, 2008, 99, 2650-2658.	4.8	75

#	Article	IF	Citations
55	Field test of algorithm for automatic cough detection in pig houses. Computers and Electronics in Agriculture, 2008, 62, 22-28.	3.7	53
56	Monitoring of swarming sounds in bee hives for early detection of the swarming period. Computers and Electronics in Agriculture, 2008, 64, 72-77.	3.7	106
57	Automatic real-time monitoring of locomotion and posture behaviour of pregnant cows prior to calving using online image analysis. Computers and Electronics in Agriculture, 2008, 64, 53-60.	3.7	89
58	Cough localization for the detection of respiratory diseases in pig houses. Computers and Electronics in Agriculture, 2008, 64, 286-292.	3.7	40
59	Cough sound analysis to identify respiratory infection in pigs. Computers and Electronics in Agriculture, 2008, 64, 318-325.	3.7	64
60	Time-series analysis for online recognition and localization of sick pig (Sus scrofa) cough sounds. Journal of the Acoustical Society of America, 2008, 124, 3803-3809.	0.5	20
61	Real-Time Measurement of Pig Activity in Practical Conditions. , 2008, , .		0
62	Development of a Dynamic Model to Predict PM_{10} Emissions from Swine Houses. Journal of Environmental Quality, 2008, 37, 557-564.	1.0	25
63	Analysis of Cough Sounds for Diagnosis of Respiratory Infections in Intensive Pig Farming. Transactions of the ASABE, 2008, 51, 1051-1055.	1.1	17
64	Effects of Corn Milling Type on Physical Characteristics and Dustiness of Swine Diets. Transactions of the ASABE, 2007, 50, 1759-1764.	1.1	7
65	Ammonia, methane, nitrous oxide and particulate matter emissions from two different buildings for laying hens. Biosystems Engineering, 2007, 97, 441-455.	1.9	62
66	OPTICAL FLOW ALGORITHM TO QUANTIFY THE TWO-DIMENSIONAL VELOCITY COMPONENTS OF A VISUALIZED AIR JET. Transactions of the American Society of Agricultural Engineers, 2004, 47, 847-856.	0.9	2
67	Field Test of Algorithm for Cough Detection in Pig Houses. , 2004, , .		1