

Publications

Cattles:

- Hu, S., Arablouei, R., Bishop-Hurley, G. J., Reverter, A., & Ingham, A. (2023). Predicting bite rate of grazing cattle from accelerometry data via semi-supervised regression. *Smart Agricultural Technology*, 5. <https://doi.org/10.1016/j.atech.2023.100256>
- Piña, R., Lange, K., Machado, V., & Bratcher, C. (2023). Big data technology adoption in beef production. *Smart Agricultural Technology*, 5. <https://doi.org/10.1016/j.atech.2023.100235>
- Nyamuryekung'e, S., Duff, G., Utsumi, S., Estell, R., McIntosh, M. M., Funk, M., Cox, A., Cao, H., Spiegel, S., Perea, A., Perea, A., & Cibils, A. F. (2023). Real-Time Monitoring of Grazing Cattle Using LORA-WAN Sensors to Improve Precision in Detecting Animal Welfare Implications via Daily Distance Walked Metrics. *Animals*, 13(16). <https://doi.org/10.3390/ani13162641>
- García García, M. J., Maroto Molina, F., Pérez Marín, C. C., & Pérez Marín, D. C. (2023). Potential for automatic detection of calving in beef cows grazing on rangelands from Global Navigate Satellite System collar data. *Animal*, 17(8). <https://doi.org/10.1016/j.animal.2023.100901>
- Studer, E., Alsaad, M., Steiner, A., & Becker, J. (2023). Application note for the use of a wireless device measuring reticular pH under practice conditions in a Swiss dairy herd. *Smart Agricultural Technology*, 4. <https://doi.org/10.1016/j.atech.2022.100170>
- Leliveld, L. M. C., Lovarelli, D., Finzi, A., Riva, E., & Provolo, G. (2023). Effects of cow reproductive status, parity and lactation stage on behaviour and heavy breathing indications of a commercial accelerometer during hot weather conditions. *International Journal of Biometeorology*, 67(7), 1263–1272. <https://doi.org/10.1007/s00484-023-02496-2>
- Fuentes, A., Han, S., Nasir, M. F., Park, J., Yoon, S., & Park, D. S. (2023). Multiview Monitoring of Individual Cattle Behavior Based on Action Recognition in Closed Barns Using Deep Learning. *Animals*, 13(12). <https://doi.org/10.3390/ani13122020>
- Balasso, P., Taccioli, C., Serva, L., Magrin, L., Andrighetto, I., & Marchesini, G. (2023). Uncovering Patterns in Dairy Cow Behaviour: A Deep Learning Approach with Tri-Axial Accelerometer Data. *Animals*, 13(11). <https://doi.org/10.3390/ani13111886>
- Abdanan Mehdizadeh, S.; Sari, M.; Orak, H.; Pereira, D.F.; Nääs, I.d.A. Classifying Chewing and Rumination in Dairy Cows Using Sound Signals and Machine Learning. *Animals* 2023, 13, 2874. <https://doi.org/10.3390/ani13182874>

- A. Bragaglio, E. Romano, M. Brambilla, C. Bisaglia, A. Lazzari, S. Giovinazzo, M. Cutini, 2023. A comparison between two specialized dairy cattle farms in the upper Po Valley. Precision agriculture as a strategy to improve sustainability, Cleaner Environmental Systems, Volume 11, 100146, ISSN 2666-7894, <https://doi.org/10.1016/j.cesys.2023.100146>.
- Ranzato, G., I. Lora, B. Aernouts, I. Adriaens, F. Gottardo & G. Cozzi (2023). Sensor-based behavioral patterns can identify heat-sensitive lactating dairy cows. Int J Biometeorol 67, 2047–2054. <https://doi.org/10.1007/s00484-023-02561-w>

Poultry:

- Li, G., Li, B., Shi, Z., Lu, G., Chai, L., Rasheed, K. M., Regmi, P., & Banakar, A. (2023). Interindividual distances and orientations of laying hens under 8 stocking densities measured by integrative deep learning techniques. *Poultry Science*, 102 (11). <https://doi.org/10.1016/j.psj.2023.103076>
- Sadeghi, M., Banakar, A., Minaei, S., Orooji, M., Shoushtari, A., & Li, G. (2023). Early Detection of Avian Diseases Based on Thermography and Artificial Intelligence. *Animals*, 13(14). <https://doi.org/10.3390/ani13142348>

Pigs:

- Wang, S., Jiang, H., Qiao, Y., & Jiang, S. (2023). A Method for Obtaining 3D Point Cloud Data by Combining 2D Image Segmentation and Depth Information of Pigs. *Animals*, 13(15). <https://doi.org/10.3390/ani13152472>
- Zhou, H., Li, Q., & Xie, Q. (2023). Individual Pig Identification Using Back Surface Point Clouds in 3D Vision. *Sensors*, 23(11). <https://doi.org/10.3390/s23115156>
- Dominique Henry, Jean Bailly, Tiphaine Pasquereau, Jean-François Bompas, Hervé Aubert, Laurianne Canario. Monitoring of sow postural activity from 3D millimeter-wave radar imaging, Computers and Electronics in Agriculture, Volume 213, 2023, 108214, ISSN 0168-1699, <https://doi.org/10.1016/j.compag.2023.108214>
- Kevin Mallinger, Luiza Corpaci, Thomas Neubauer, Ildikó E. Tikász, Thomas Banhazi, 2023. Unsupervised and supervised machine learning approach to assess user readiness levels for precision livestock farming technology adoption in the pig and poultry industries, in Computers and Electronics in Agriculture, Volume 213, 108239, ISSN 0168-1699, <https://doi.org/10.1016/j.compag.2023.108239>.

Other articles:

- Taghipoor, M., Pastell, M., Martin, O., Nguyen Ba, H., van Milgen, J., Doeschl-Wilson, A., Loncke, C., Friggens, N. C., Puillet, L., & Muñoz-Tamayo, R. (2023). Animal board invited review: Quantification of resilience in farm animals. *Animal: An International Journal of Animal Bioscience*, 17(9), 100925. <https://doi.org/10.1016/j.animal.2023.100925>
- Marino, R., Petrerá, F., & Abeni, F. (2023). Scientific Productions on Precision Livestock Farming: An Overview of the Evolution and Current State of Research Based on a Bibliometric Analysis. *Animals*, 13(14). <https://doi.org/10.3390/ani13142280>
- Li, G., & Chai, L. (2023). AnimalAccML: An open-source graphical user interface for automated behavior analytics of individual animals using triaxial accelerometers and machine learning. *Computers and Electronics in Agriculture*, 209. <https://doi.org/10.1016/j.compag.2023.107835>
- Liu G., H. Guo, A. Ruchay, A. Pezzuolo (2023). Recent Advancements in Precision Livestock Farming. *Agriculture*, 13, 1652. <https://doi.org/10.3390/agriculture13091652>