

# Najważniejsze publikacje naukowe mgr inż. Anna Paleczek

## Artykuły związane z tematem pracy doktorskiej:

- A. Paleczek and A. Rydosz, ‘Review of the algorithms used in exhaled breath analysis for the detection of diabetes’, *J Breath Res*, vol. 16, no. 2, p. 026003, Jan. 2022, doi: 10.1088/1752-7163/AC4916.
- A. Paleczek, ‘Recent achievements of exhaled breath analysis at the research stage—Artificial intelligence and machine learning algorithms’, *Exhaled Breath Analysis*, pp. 325–355, Jan. 2025, doi: 10.1016/B978-0-443-33796-3.00005-2.
- A. Paleczek, D. Grochala, and A. Rydosz, ‘Artificial breath classification using XGBoost algorithm for diabetes detection’, *Sensors*, vol. 21, no. 12, 2021, doi: 10.3390/s21124187.
- A. Paleczek and A. Rydosz, ‘The effect of high ethanol concentration on E-nose response for diabetes detection in exhaled breath: Laboratory studies’, *Sens Actuators B Chem*, vol. 408, p. 135550, Jun. 2024, doi: 10.1016/J.SNB.2024.135550.
- A. Paleczek *et al.*, ‘Noninvasive Total Cholesterol Level Measurement Using an E-Nose System and Machine Learning on Exhaled Breath Samples’, *ACS Sens*, Nov. 2024, doi: 10.1021/ACSSENSORS.4C02198.

## Artykuły niezwiązane z tematem pracy doktorskiej:

- A. Paleczek and A. Rydosz, “Medical sensor network and machine learning-enabled digital twins for diagnostic and therapeutic purposes,” in *Sensor networks for smart hospitals*, T. A. Nguyen, Ed., Amsterdam: Elsevier, 2025, pp. 77–94, ISBN: 9780443363702, e-ISBN: 9780443363719.
- D. Grochala, A. Paleczek, K. Staszek, M. Kocoń, K. Segelyn, Ł. Błajszczak, and A. Rydosz, “The impact of the epoxy thin-film layer on microwave-based gas sensor for detection,” *Sens. Actuators A Phys.*, vol. 388, art. no. 116498, pp. 1–8, 2025.
- J. Ramón-Azcón, A. Rydosz, F. De Chiara, J. M. Fernández-Costa, A. Ferret-Miñana, D. Grochala, J. Grochala, G. Lopez-Muñoz, S. Mughal, and A. Paleczek, *Human organs-on-a-chip: novel organ-on-a-chip techniques in medicine*, London: Academic Press, an imprint of Elsevier, 2024.
- A. Paleczek, D. Grochala, K. Staszek, S. Gruszczyński, E. Maciak, Z. Opilski, P. Kałużyński, M. Wójcikowski, T.-V. Cao, and A. Rydosz, “A sensor based on thin films for automotive applications in the microwave frequency range,” *Sens. Actuators B Chem.*, vol. 376 pt. B, art. no. 132964, pp. 1–13, 2023.
- K. Przystalski, A. Paleczek, K. Szustakowski, P. Wawryka, M. Jungiewicz, M. Zalewski, J. Kwiatkowski, A. Gądek, and K. Miśkowiec, “Automated correction angle calculation in high tibial osteotomy planning,” *Sci. Rep.*, vol. 13, no. 1, art. no. 12876, pp. 1–10, 2023.
- Ł. Fuśnik, B. Szafraniak, A. Paleczek, D. Grochala, and A. Rydosz, “A review of gas measurement set-ups,” *Sensors*, vol. 22, no. 7, art. no. 2557, pp. 1–30, 2022.
- D. Grochala, A. Paleczek, J. Bronicki, K. Marszałek, and A. Rydosz, “Wykorzystanie technologii GLAD do zastosowań w przenośnych analizatorach oddechu — The use of GLAD technology for applications in portable respiratory analyzers,” *Przegl. Elektrotech.*, vol. 98, no. 12, pp. 118–120, 2022.

- A. Paleczek, B. Szafraniak, Ł. Fuśnik, A. Brudnik, D. Grochala, S. Kluska, M. Jurzecka-Szymacha, E. Maciak, P. Kałużyński, and A. Rydosz, “The heterostructures of CuO and SnO<sub>x</sub> for NO<sub>2</sub> detection,” *Sensors*, vol. 21, no. 13, art. no. 4387, pp. 1–17, 2021.