

## DAFTAR PUSTAKA

- Agustika, D. K., Hidayat, S. N., Triyana, K., Iliescu, D. D., & Leeson, M. S. (2020). Steady-state response feature extraction optimization to enhance electronic nose performance. *International Conference on Electrical Engineering, Computer Science and Informatics (EECSI), 2020-October*, 144–149. <https://doi.org/10.23919/EECSI50503.2020.9251887>
- Amertaningtyas, D. (2011). Mini review : Pengolahan k erupuk “ Rambak ” kulit di Indonesia. *Jurnal Ilmu-Ilmu Peternakan*, 21(3), 18–29.
- Bhattacharyya, Nabarun & Bandyopadhyay, R. (2010). Electronic Nose and Electronic Tongue. In *Nondestructive Evaluation of Food Quality* (pp. 73–100). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-15796-7\\_4](https://doi.org/10.1007/978-3-642-15796-7_4)
- Choopun, S., Hongsith, N., & Wongrat, E. (2012). Metal-Oxide Nanowires for Gas Sensors. *Intech*, 2–24. <http://dx.doi.org/10.1039/C7RA00172J%0Ahttps://www.intechopen.com/books/advanced-biometric-technologies/liveness-detection-in-biometrics%0Ahttp://dx.doi.org/10.1016/j.colsurfa.2011.12.014>
- Emilio, P., & Maurizio, D. (2013). Data acquisition systems: From fundamentals to applied design. In *Data Acquisition Systems: From Fundamentals to Applied Design*. <https://doi.org/10.1007/9781461442141>
- Erwanto, Y., & Muttaqien, A. T. (2016). Use of Fourier Transform Infrared ( FTIR ) Spectroscopy and Chemometrics for Analysis of Lard Adulteration in “ Rambak ” Crackers Use of Fourier Transform Infrared ( FTIR ) Spectroscopy and Chemometrics for Analysis of Lard Adulteration in “ Rambak ” Crac. *International Journal of Food Properties*, 19(12), 2718–2725. <https://doi.org/10.1080/10942912.2016.1143839>
- Haleem, A., Khan, M. I., Khan, S., & Jami, A. R. (2020). Research status in Halal: a review and bibliometric analysis. *Modern Supply Chain Research and Applications*, 2(1), 23–41. <https://doi.org/10.1108/mscra-06-2019-0014>
- Hidayat, S. N., Julian, T., Dharmawan, A. B., Puspita, M., Chandra, L., Rohman, A.,

- Julia, M., Rianjanu, A., Nurputra, D. K., Triyana, K., & Wasisto, H. S. (2022). Hybrid learning method based on feature clustering and scoring for enhanced COVID-19 breath analysis by an electronic nose. *Artificial Intelligence in Medicine*, 129(May), 102323. <https://doi.org/10.1016/j.artmed.2022.102323>
- Hidayat, S. N., Triyana, K., Fauzan, I., Julian, T., Lelono, D., Yusuf, Y., Ngadiman, N., Veloso, A. C. A., & Peres, A. M. (2019). The electronic nose coupled with chemometric tools for discriminating the quality of black tea samples in situ. *Chemosensors*, 7(3). <https://doi.org/10.3390/chemosensors7030029>
- Jahangir, M., Mehmood, Z., Bashir, Q., Mehboob, F., & Ali, K. (2016). Trends in Food Science & Technology Halal status of ingredients after physicochemical alteration ( Istihalah ). *Trends in Food Science & Technology*, 47, 78–81. <https://doi.org/10.1016/j.tifs.2015.10.011>
- Jolliffe, I. T. (2002). Principal components analysis. *International Encyclopedia of Education*, 374–377. <https://doi.org/10.1016/B978-0-08-044894-7.01358-0>
- Loutfi, A., Coradeschi, S., Mani, G. K., Shankar, P., & Rayappan, J. B. B. (2015). Electronic noses for food quality: A review. *Journal of Food Engineering*, 144, 103–111. <https://doi.org/10.1016/j.jfoodeng.2014.07.019>
- Nakamoto, T. (2016). *Essentials of Machine Olfaction and Taste* (T. Nakamoto (ed.)). John Wiley & Sons Singapore Pte Ltd.
- Natale, C. Di, Davide, F., & Amico, A. D. (1995). Pattern recognition in gas sensing: well-stated techniques and advances. *Sensors And Actuators*, 23, 111–118.
- Patel, H. K. (2014). *The Electronic Nose: Artificial Olfaction Technology* (1st ed.). Springer India. [https://doi.org/10.1007/978-81-322-1548-6\\_5](https://doi.org/10.1007/978-81-322-1548-6_5)
- Pearce, T.C., Schiffman, S.S., Nagle, H.T. and Gardner, J. . (2003). *Handbook of Machine Olfaction: Electronic Nose Technology*. Wiley-VCH Verlag GmbH & Co. KGaA. <https://doi.org/10.1002/3527601597>
- Pranata, A. W. (2021). *Aplikasi volatilmik berbasis spme-gc-ms untuk autentikasi daging dan bakso sapi*. Institut Pertanian Bogor.

- Puspita, M. (2020). *Klasifikasi Sosis Berdasarkan Asal Daging Menggunakan Hidung Elektronik yang Dikopel dengan Kemometrik*. Universitas Gadjah Mada.
- Putra, J. W. G. (2019). Pengenalan konsep pembelajaran mesin dan deep learning. *Computational Linguistics and Natural Language Processing Laboratory*, 4, 1–235. <https://www.researchgate.net/publication/323700644>
- Putri, L. A. (2020). *Diferensiasi Abon Menggunakan Electronic Nose yang Terhubung dengan Sistem Kemometrik*. Universitas Gadjah Mada.
- Radi, Rivai, M., & Purnomo, M. H. (2016). Study on electronic-nose-based quality monitoring system for coffee under roasting. *Journal of Circuits, Systems and Computers*, 25(10). <https://doi.org/10.1142/S0218126616501164>
- Sabilla, S. I., Sarno, R., Triyana, K., & Hayashi, K. (2020). Deep learning in a sensor array system based on the distribution of volatile compounds from meat cuts using GC–MS analysis. *Sensing and Bio-Sensing Research*, 29(July), 100371. <https://doi.org/10.1016/j.sbsr.2020.100371>
- Sarno, R., Triyana, K., Sabilla, S. I., Wijaya, D. R., Sunaryono, D., & Fatichah, C. (2020). Detecting Pork Adulteration in Beef for Halal Authentication using an Optimized Electronic Nose System. *IEEE Access*, 8, 25–30. <https://doi.org/10.1109/ACCESS.2020.3043394>
- Sulistya, E. (2020). Penggunaan Arduino dan Sistem Akuisisi Data Excel Pada Praktikum Kesetaraan Kalor Listrik. *Jurnal Fisika Indonesia*, 22(2), 12–14. <https://doi.org/10.22146/jfi.v22i2.40031>
- Tharwat, A. (2021). *Classification assessment methods*. 17(1), 168–192. <https://doi.org/10.1016/j.aci.2018.08.003>
- Tian, X., Wang, J., & Cui, S. (2013). Analysis of pork adulteration in minced mutton using electronic nose of metal oxide sensors. *Journal of Food Engineering*, 119(4), 744–749. <https://doi.org/10.1016/j.jfoodeng.2013.07.004>
- Wicaksono, A. N. (2015). *Application of An Electronic Nose Based on Gas Sensor Array Combined with Artificial Neural Network for Discriminant of Skin Crackers*. Universitas Gadjah Mada.

- Wilson, A. D., & Baietto, M. (2009). Applications and Advances in Electronic-Nose Technologies. *Sensors*, *9*(7), 5099–5148. <https://doi.org/10.3390/s90705099>
- Yan, J., Guo, X., Duan, S., Jia, P., Wang, L., Peng, C., & Zhang, S. (2015). Electronic nose feature extraction methods: A review. *Sensors (Switzerland)*, *15*(11), 27804–27831. <https://doi.org/10.3390/s151127804>
- Zhang, C., Liu, G., Geng, X., Wu, K., & Debliquy, M. (2020). Metal oxide semiconductors with highly concentrated oxygen vacancies for gas sensing materials: A review. *Sensors and Actuators, A: Physical*, *309*. <https://doi.org/10.1016/j.sna.2020.112026>