

References

- Addo-Preko, E., Niilante, G., & Blay, Y. (2023). The relevance of the number of categories in the hedonic scale to the Ghanaian consumer in acceptance testing. *The Relevance of the Number of Categories in the Hedonic Scale to the Ghanaian Consumer in Acceptance Testing*, 3(1). <https://doi.org/10.3389/frfst.2023.1071216>
- Adebowale, O. J., & Ajibode, O. O. (2024). Soymilk dreg (okara) from a food waste to valuable ingredient for shortbread with improved sensory quality. *Ilaro Journal of Science and Technology*, 3(2024), 62–69.
- Adeyanju, A. A., Emmanuel, P. O., Adetunji, A. I., & Adebo, O. A. (2025). Nutritional, pasting, rheological and thermal properties of sorghum-Okara composite flours and porridges. *International Journal of Food Science & Technology*, 60(1). <https://doi.org/10.1093/ijfood/vvae021>
- Adibah, L. N., Afizah, M. N., Zunairah, W. I. W., & Muhammad, S. K. S. (2024). Development of fibre-rich okara-based expanded snack via single screw extrusion. *Food Research*, 8(2), 48–56. [https://doi.org/10.26656/fr.2017.8\(2\).145](https://doi.org/10.26656/fr.2017.8(2).145)
- Agama-Acevedo, E., Pacheco-Vargas, G., Gutierrez-Meraz, F., Tovar, J., & Bello-Perez, L. A. (2019). Dietary fiber content, texture, and in vitro starch digestibility of different white bread crusts. *Journal of Cereal Science*, 89, 102824. <https://doi.org/10.1016/j.jcs.2019.102824>
- Agbangba, C. E., Aide, E. S., Honfo, H., & Kakai, R. G. (2024). On the use of post-hoc tests in environmental and biological sciences: A critical review. *Heliyon*, 10(3), e25131–e25131. <https://doi.org/10.1016/j.heliyon.2024.e25131>
- Aghajanzadeh, S., Sultana, A., Mohammad Ziiaifar, A., & Khalloufi, S. (2024). Formation of pores and bubbles and their impacts on the quality attributes of processed foods: A review. *Food Research International*, 188, 114494. <https://doi.org/10.1016/j.foodres.2024.114494>

- Alam, M. S., Kaur, J., Khaira, H., & Gupta, K. (2015). Extrusion and extruded products: Changes in quality attributes as affected by extrusion process parameters: A review. *Critical Reviews in Food Science and Nutrition*, 56(3), 445–473. <https://doi.org/10.1080/10408398.2013.779568>
- Alba, K., Campbell, G. M., & Kontogiorgos, V. (2019). Dietary fibre from berry-processing waste and its impact on bread structure: A review. *Journal of the Science of Food and Agriculture*, 99(9), 4189–4199. <https://doi.org/10.1002/jsfa.9633>
- Alcaire, F., Antúnez, L., Vidal, L., Zorn, S., Giménez, A., Castura, J. C., & Ares, G. (2017). Comparison of static and dynamic sensory product characterizations based on check-all-that-apply questions with consumers. *Food Research International*, 97, 215–222. <https://doi.org/10.1016/j.foodres.2017.04.012>
- Alcantara, M. de, & Freitas-Sá, D. D. G. C. (2018). Metodologias sensoriais descritivas mais rápidas e versáteis – uma atualidade na ciência sensorial. *Brazilian Journal of Food Technology*, 21(0). <https://doi.org/10.1590/1981-6723.17916>
- Aleid, S. M., AL-Hulaibi, A. A., Ghoush, M. A., & Al-Shathri, A. A. (2015). Enhancing arabic bread quality and shelf life stability using bread improvers. *Journal of Food Science and Technology*, 52(8), 4761–4772. <https://doi.org/10.1007/s13197-014-1618-x>
- Aleixandre, A., Benavent-Gil, Y., Velickova, E., & Rosell, C. M. (2021). Mastication of crisp bread: Role of bread texture and structure on texture perception. *Food Research International*, 147, 110477. <https://doi.org/10.1016/j.foodres.2021.110477>
- Alexi, N., Nanou, E., Lazo, O., Guerrero, L., Grigorakis, K., & Byrne, D. V. (2018). Check-All-That-Apply (CATA) with semi-trained assessors: Sensory profiles closer to descriptive analysis or consumer elicited data? *Food Quality and Preference*, 64, 11–20. <https://doi.org/10.1016/j.foodqual.2017.10.009>
- Ali, Z., Bhaskar, S. B., & Sudheesh, K. (2019). Descriptive statistics: Measures of central tendency, dispersion, correlation and regression. *Airway*, 2(3), 120. https://doi.org/10.4103/arwy.arwy_37_19

- Almeida, E. L., Steel, C. J., & Chang, Y.-S. (2014). Par-baked bread technology: Formulation and process studies to improve quality. *Critical Reviews in Food Science and Nutrition*, 56(1), 70–81. <https://doi.org/10.1080/10408398.2012.715603>
- Almufarrij, M. W., Wardah, & Dwi Cahyani, W. (2024). Effect of using sourdough yeast and the long time of final proofing on the physical properties of flashed bread. *Agricultural Science*, 7(2), 93–105. <https://doi.org/10.55173/agriscience.v7i2.124>
- Ana, A., Subekti, S., Hamidah, S., & Komariah, K. (2017). Organoleptic test patisserie product based on consumer preference. *IOP Conference Series: Materials Science and Engineering*, 180, 012294. <https://doi.org/10.1088/1757-899x/180/1/012294>
- Andersen, B. V., Brockhoff, P. B., & Hyldig, G. (2019). The importance of liking of appearance, -odour, -taste and -texture in the evaluation of overall liking. A comparison with the evaluation of sensory satisfaction. *Food Quality and Preference*, 71, 228–232. <https://doi.org/10.1016/j.foodqual.2018.07.005>
- Andrade, C. (2019). The P value and statistical significance: Misunderstandings, explanations, challenges, and alternatives. *Indian Journal of Psychological Medicine*, 41(3), 210–215. https://doi.org/10.4103/ijpsym.ijpsym_193_19
- Angelina, E., & Waspodo, P. (2024). The effect of curdlan hydrocolloid on the characteristics and sensory of non-gluten noodles. *IOP Conference Series: Earth and Environmental Science*, 1324(1), 012111. <https://doi.org/10.1088/1755-1315/1324/1/012111>
- Anindita, B. P., Antari, A. T., & Gunawan, S. (2020). Pembuatan MOCAF (modified cassava flour) dengan kapasitas 91000 ton/tahun. *Jurnal Teknik ITS*, 8(2), F170–F175. <https://doi.org/10.12962/j23373539.v8i2.45058>
- Antúñez, L., Giménez, A., & Ares, G. (2016). A consumer-based approach to salt reduction: Case study with bread. *Food Research International*, 90, 66–72. <https://doi.org/10.1016/j.foodres.2016.10.015>

- Arai, Y., Nishinari, K., & Nagano, T. (2022). Wet grinder-treated okara improved both mechanical properties and intermolecular forces of soybean protein isolate gels. *Gels*, 8(10), 616–616. <https://doi.org/10.3390/gels8100616>
- Ares, G., & Jaeger, S. R. (2015). Examination of sensory product characterization bias when check-all-that-apply (CATA) questions are used concurrently with hedonic assessments. *Food Quality and Preference*, 40, 199–208. <https://doi.org/10.1016/j.foodqual.2014.10.004>
- Arwini, N. P. D. (2021). Roti, pemilihan bahan dan proses pembuatan. *Jurnal Ilmiah Vastuwidya*, 4(1), 33–40. <https://doi.org/10.47532/jiv.v4i1.249>
- Ashaolu, T. J., & Zhao, G. (2020). Fabricating a pickering stabilizer from okara dietary fibre particulates by conjugating with soy protein isolate via maillard reaction. *Foods*, 9(2), 143. <https://doi.org/10.3390/foods9020143>
- Asioli, D., Aschemann-Witzel, J., Caputo, V., Vecchio, R., Annunziata, A., Næs, T., & Varela, P. (2017). Making sense of the “clean label” trends: A review of consumer food choice behavior and discussion of industry implications. *Food Research International*, 99(1), 58–71. <https://doi.org/10.1016/j.foodres.2017.07.022>
- Astuti, R. D., Nur, L., Handoko, D. D., David, W., Budijanto, S., Shirakawa, H., & Ardiansyah. (2022). The volatile compounds and aroma description in various rhizopus oligosporus solid-state fermented and nonfermented rice bran. *Fermentation*, 8(3), 120–120. <https://doi.org/10.3390/fermentation8030120>
- Aussanasuwannakul, A., Puntaburt, K., & Pantoa, T. (2024). Enhancing gluten-free crispy waffles with soybean residue (okara) flour: Rheological, nutritional, and sensory impacts. *Foods*, 13(18), 2951–2951. <https://doi.org/10.3390/foods13182951>
- Aussanasuwannakul, A., Teangpook, C., Treesuwan, W., Puntaburt, K., & Butsuwan, P. (2022). Effect of the addition of soybean residue (okara) on the physicochemical, tribological, instrumental,

- and sensory texture properties of extruded snacks. *Foods*, 11(19), 2967. <https://doi.org/10.3390/foods11192967>
- Avram, C., & Mărușteri, M. (2022). Normality assessment, few paradigms and use cases. *Revista Romana de Medicina de Laborator*, 30(3), 251–260. <https://doi.org/10.2478/rrlm-2022-0030>
- Avramenko, N. A., Tyler, R. T., Scanlon, M. G., Hucl, P., & Nickerson, M. T. (2017). The chemistry of bread making: The role of salt to ensure optimal functionality of its constituents. *Food Reviews International*, 34(3), 204–225. <https://doi.org/10.1080/87559129.2016.1261296>
- Azadfar, E., Elhami Rad, A. H., Sharifi, A., & Armin, M. (2023). Effect of olive pomace fiber on the baking properties of wheat flour and flat bread (barbari bread) quality. *Journal of Food Processing and Preservation*, 2023, 1–9. <https://doi.org/10.1155/2023/1405758>
- Azami, T., Niakousari, M., Hashemi, S. M. B., & Torri, L. (2018). A three-step sensory-based approach to maximize consumer acceptability for new low-sugar licorice-chocolate-flavored milk drink. *LWT*, 91, 375–381. <https://doi.org/10.1016/j.lwt.2018.01.064>
- Azmoon, E., Saberi, F., Kouhsari, F., Akbari, M., Kieliszek, M., & Vakilinezam, A. (2021). The effects of hydrocolloids-protein mixture as a fat replacer on physicochemical characteristics of sugar-free muffin cake: Modeling and optimization. *Foods*, 10(7), 1549. <https://doi.org/10.3390/foods10071549>
- Azni, I. N., Prabawati, A. T. A., Basriman, I., & Amelia, J. R. (2023). Quality characteristics of sourdough bread with the addition of water yest and wheat-mocaf flours combination. *Jurnal Teknik Pertanian Lampung (Journal of Agricultural Engineering)*, 12(2), 350–362. <https://doi.org/10.23960/jtep-l.v12i2.350-362>
- Ballester-Sánchez, J., Gil, J. V., Haros, C. M., & Fernández-Espinar, M. T. (2019). Effect of incorporating white, red or black quinoa flours on free and bound polyphenol content, antioxidant activity and colour of bread. *Plant Foods for Human Nutrition (Dordrecht, Netherlands)*, 74(2), 185–191. <https://doi.org/10.1007/s11130-019-00718-w>

- Bamidele, O. P., Adewole, O. J., & Feng, X. (2023). Sensory perspectives into indigenous fermented foods in the tropics: Challenges and opportunities. *Indigenous Fermented Foods for the Tropics*, 483–502. <https://doi.org/10.1016/b978-0-323-98341-9.00023-2>
- Baú, T. R., Garcia, S., & Ida, E. I. (2015). Changes in soymilk during fermentation with kefir culture: Oligosaccharides hydrolysis and isoflavone aglycone production. *International Journal of Food Sciences and Nutrition*, 66(8), 845–850. <https://doi.org/10.3109/09637486.2015.1095861>
- Benayad, A., Taghouti, M., Benali, A., Aboussaleh, Y., & Benbrahim, N. (2021). Nutritional and technological assessment of durum wheat-faba bean enriched flours, and sensory quality of developed composite bread. *Saudi Journal of Biological Sciences*, 28(1), 635–642. <https://doi.org/10.1016/j.sjbs.2020.10.053>
- Bender, D., & Schönlechner, R. (2020). Innovative approaches towards improved gluten-free bread properties. *Journal of Cereal Science*, 91, 102904. <https://doi.org/10.1016/j.jcs.2019.102904>
- Berenstein, N. (2016). Making a global sensation: Vanilla flavor, synthetic chemistry, and the meanings of purity. *History of Science*, 54(4), 399–424. <https://doi.org/10.1177/0073275316681802>
- Bhat, I. M., Wani, S. M., Mir, S. A., & Naseem, Z. (2023). Effect of microwave-assisted vacuum and hot air oven drying methods on quality characteristics of apple pomace powder. *Food Production, Processing and Nutrition*, 5(1). <https://doi.org/10.1186/s43014-023-00141-4>
- Bhatt, S. M., & Gupta, R. K. (2015). Bread (composite flour) formulation and study of its nutritive, phytochemical and functional properties. *Journal of Pharmacognosy and Phytochemistry*, 4(2), 254–268.
- Bian, X., Xing, T., Yang, Y., Fan, J., Ma, C., Liu, X., Wang, Y., He, Y., Wang, L., Wang, B., & Zhang, N. (2022). Effect of soy protein isolate on physical properties of quinoa dough and gluten-free bread quality characteristics. *Journal of the Science of Food and Agriculture*, 103(1), 118–124. <https://doi.org/10.1002/jsfa.12118>

- Bieniek, A., & Buksa, K. (2024). The influence of arabinoxylans on the properties of wheat bread baked using the postponed baking method. *Molecules*, 29(4), 904–904. <https://doi.org/10.3390/molecules29040904>
- Biesiekierski, J. R. (2017). What Is gluten? *Journal of Gastroenterology and Hepatology*, 32(S1), 78–81. <https://doi.org/10.1111/jgh.13703>
- Blaak, J., Keller, D., Simon, I., Schlei inger, M., Sch urer, N. Y., & Staib, P. (2018). Consumer Panel Size in Sensory Cosmetic Product Evaluation: A Pilot Study from a Statistical Point of View. *Journal of Cosmetics, Dermatological Sciences and Applications*, 08(03), 97–109. <https://doi.org/10.4236/jcdsa.2018.83012>
- Boita, E. R. F., Oro, T., Bressiani, J., Santetti, G. S., Bertolin, T. E., & Gutkoski, L. C. (2016). Rheological properties of wheat flour dough and pan bread with wheat bran. *Journal of Cereal Science*, 71, 177–182. <https://doi.org/10.1016/j.jcs.2016.08.015>
- Bourekoua, H., R  y  , R., Benatallah, L., W  jtowicz, A.,   ysiak, G., Zidoune, M. N., & Sujak, A. (2017). Characteristics of gluten-free bread: Quality improvement by the addition of starches/hydrocolloids and their combinations using a definitive screening design. *European Food Research and Technology*, 244(2), 345–354. <https://doi.org/10.1007/s00217-017-2960-9>
- Brandner, S., Becker, T., & Jekle, M. (2019). Classification of starch-gluten networks into a viscoelastic liquid or solid, based on rheological aspects — A review. *International Journal of Biological Macromolecules*, 136, 1018–1025. <https://doi.org/10.1016/j.ijbiomac.2019.06.160>
- Brites, L. T. G. F., Rebellato, A. P., Meinhart, A. D., Godoy, H. T., Pallone, J. A. L., & Steel, C. J. (2022). Technological, sensory, nutritional and bioactive potential of pan breads produced with refined and whole grain buckwheat flours. *Food Chemistry: X*, 13, 100243. <https://doi.org/10.1016/j.fochx.2022.100243>
- Bu, F., Liu, J., Song, Z., Sun, M., Wang, Z., Jing, M., & Qian, W. (2024). Enhancement of water-retaining property and cracking resistance of soil under wetting-drying cycles: Synergistic effect of sisal

- fiber and polyacrylamide. *Construction and Building Materials*, 435, 136841–136841. <https://doi.org/10.1016/j.conbuildmat.2024.136841>
- Bustamante, M., Fernández-Gil, M., Churrua, I., Miranda, J., Lasa, A., Navarro, V., & Simón, E. (2017). Evolution of gluten content in cereal-based gluten-free products: An overview from 1998 to 2016. *Nutrients*, 9(1), 21. <https://doi.org/10.3390/nu9010021>
- Cabrera, E. R., Arriaza, M., & Rodríguez-Entrena, M. (2015). Is the extra virgin olive oil market facing a process of differentiation? A hedonic approach to disentangle the effect of quality attributes. *Grasas Y Aceites*, 66(4), e105. <https://doi.org/10.3989/gya.0253151>
- Cai, L., Choi, I., Park, C. S., & Baik, B.-K. (2015). Bran hydration and physical treatments improve the bread-baking quality of whole grain wheat flour. *Cereal Chemistry Journal*, 92(6), 557–564. <https://doi.org/10.1094/cchem-04-15-0064-r>
- Campo, E., del Arco, L., Urtasun, L., Oria, R., & Ferrer-Mairal, A. (2016). Impact of sourdough on sensory properties and consumers' preference of gluten-free breads enriched with teff flour. *Journal of Cereal Science*, 67, 75–82. <https://doi.org/10.1016/j.jcs.2015.09.010>
- Cao, Z., Zhou, L., Gao, S., Yang, C., Meng, X., & Liu, Z. (2024). Effects of different amounts of okara on texture, digestive properties, and microstructure of noodles. *Food Science & Nutrition*, 12(5), 3433–3442. <https://doi.org/10.1002/fsn3.4007>
- Cappelli, A., Bettaccini, L., & Cini, E. (2020). The kneading process: A systematic review of the effects on dough rheology and resulting bread characteristics, including improvement strategies. *Trends in Food Science & Technology*, 104, 91–101. <https://doi.org/10.1016/j.tifs.2020.08.008>
- Cappelli, A., Lupori, L., & Cini, E. (2021). Baking technology: A systematic review of machines and plants and their effect on final products, including improvement strategies. *Trends in Food Science & Technology*, 115, 275–284. <https://doi.org/10.1016/j.tifs.2021.06.048>
- Cappelli, A., Oliva, N., & Cini, E. (2020). A systematic review of gluten-free dough and bread: Dough rheology, bread characteristics, and improvement strategies. *Applied Sciences*, 10(18), 6559. <https://doi.org/10.3390/app10186559>

- Capriles, V. D., de, V., Santos, F. G., Aguilar, E., Guedes, B., Tagliapietra, B. L., Scarton, M., Teresa, M., & Conti-Silva, A. C. (2023). Current status and future prospects of sensory and consumer research approaches to gluten-free bakery and pasta products. *Food Research International*, 173, 113389–113389. <https://doi.org/10.1016/j.foodres.2023.113389>
- Carabante, K. M., & Prinyawiwatkul, W. (2018). Data analyses of a multiple-samples sensory ranking test and its duplicated test: A review. *Journal of Sensory Studies*, 33(4), e12435. <https://doi.org/10.1111/joss.12435>
- Cardello, A. V. (2017). Hedonic scaling: Assumptions, contexts and frames of reference. *Current Opinion in Food Science*, 15, 14–21. <https://doi.org/10.1016/j.cofs.2017.05.002>
- Carini, E., Curti, E., Fattori, F., Paciulli, M., & Vittadini, E. (2016). Staling of gluten-free breads: Physico-chemical properties and ¹H NMR mobility. *European Food Research and Technology*, 243(5), 867–877. <https://doi.org/10.1007/s00217-016-2801-2>
- Carocho, M., Morales, P., Ciudad-Mulero, M., Fernández-Ruiz, V., Ferreira, E., Heleno, S., Rodrigues, P., Barros, L., & Ferreira, I. C. F. R. (2020). Comparison of different bread types: Chemical and physical parameters. *Food Chemistry*, 310, 125954. <https://doi.org/10.1016/j.foodchem.2019.125954>
- Castro, W., Oblitas, J., Chuquizuta, T., & Avila-George, H. (2017). Application of image analysis to optimization of the bread-making process based on the acceptability of the crust color. *Journal of Cereal Science*, 74, 194–199. <https://doi.org/10.1016/j.jcs.2017.02.002>
- Castura, J. C., Varela, P., & Næs, T. (2023). Investigating paired comparisons after principal component analysis. *Food Quality and Preference*, 106, 104814. <https://doi.org/10.1016/j.foodqual.2023.104814>
- Cauvain, S. (2014). Bread: The product. *Technology of Breadmaking*, 1–22. https://doi.org/10.1007/978-3-319-14687-4_1

- Cauvain, S. P. (2021). The contribution of water to dough formation and bread quality. In S. P. Cauvain (Ed.), *Breadmaking* (pp. 441–464). Woodhead Publishing. <https://doi.org/10.1016/B978-0-08-102519-2.00015-3>
- Čech, M., Herc, P., Ivanišová, E., Kolesárová, A., Urminská, D., & Grygirieva, O. (2022). Okara-by-product from soy processing: characteristic, properties, benefits, and potential perspectives for industry. *International Journal of Experimental Research and Review*, 28, 66–83.
- Çelik, E. E., & Gökmen, V. (2020). Formation of Maillard reaction products in bread crust-like model system made of different whole cereal flours. *European Food Research and Technology*, 246. <https://doi.org/10.1007/s00217-020-03481-4>
- Chakrabarti-Bell, S., Lukasczyk, J., Liu, J., Maciejewski, R., Xiao, X., Mayo, S., & Regenauer-Lieb, K. (2021). Flour Quality effects on percolation of gas bubbles in wheat flour doughs. *Innovative Food Science & Emerging Technologies*, 74, 102841–102841. <https://doi.org/10.1016/j.ifset.2021.102841>
- Chakraborty, P., Witt, T., Harris, D., Ashton, J., Stokes, J. R., & Smyth, H. E. (2019). Texture and mouthfeel perceptions of a model beverage system containing soluble and insoluble oat bran fibres. *Food Research International*, 120, 62–72. <https://doi.org/10.1016/j.foodres.2019.01.070>
- Chandra, M. V., & Shamasundar, B. A. (2014). Texture profile analysis and functional properties of gelatin from the skin of three species of fresh water fish. *International Journal of Food Properties*, 18(3), 572–584. <https://doi.org/10.1080/10942912.2013.845787>
- Chatzi, A., & Doody, O. (2023). The one-way ANOVA test explained. *The One-Way ANOVA Test Explained*, 31(3). <https://doi.org/10.7748/nr.2023.e1885>
- Chen, Y. (2015). *Effects of micronization, ethanol washing, and enzymatic hydrolysis processing alone or in combination on trypsin inhibitors, lipoxygenase activities and selected “beany” flavour related compounds in soybean flour* [MSc].

- Chhanwal, N., & Anandharamakrishnan, C. (2014). Temperature- and moisture-based modeling for prediction of starch gelatinization and crumb softness during bread-baking process. *Journal of Texture Studies*, 45(6), 462–476. <https://doi.org/10.1111/jtxs.12097>
- Chigwedere, C. M., Wanasundara, J. P. D., & Shand, P. J. (2022). Sensory descriptors for pulses and pulse-derived ingredients: Toward a standardized lexicon and sensory wheel. *Comprehensive Reviews in Food Science and Food Safety*, 21(2), 999–1023. <https://doi.org/10.1111/1541-4337.12893>
- Choi, W.-S., & Seo, H.-S. (2023). Effects of age group, gender, and consumption frequency on texture perception and liking of cooked rice or bread. *Foods*, 12(9), 1793–1793. <https://doi.org/10.3390/foods12091793>
- Chua, J.-Y., & Liu, S.-Q. (2019). Soy whey: More than just wastewater from tofu and soy protein isolate industry. *Trends in Food Science & Technology*, 91, 24–32. <https://doi.org/10.1016/j.tifs.2019.06.016>
- Clemens, R. A., Jones, J. M., Kern, M., Lee, S.-Y., Mayhew, E. J., Slavin, J. L., & Zivanovic, S. (2016). Functionality of sugars in foods and health. *Comprehensive Reviews in Food Science and Food Safety*, 15(3), 433–470. <https://doi.org/10.1111/1541-4337.12194>
- Conte, P., Fadda, C., Drabińska, N., & Krupa-Kozak, U. (2018). Technological and nutritional challenges, and novelty in gluten-free breadmaking: A review. *Polish Journal of Food and Nutrition Sciences*, 69(1), 5–21. <https://doi.org/10.31883/pjfn-2019-0005>
- Corrado, M., Zafeiriou, P., Ahn-Jarvis, J. H., Savva, G. M., Edwards, C. H., & Hazard, B. A. (2023). Impact of storage on starch digestibility and texture of a high-amylose wheat bread. *Food Hydrocolloids*, 135, 108139. <https://doi.org/10.1016/j.foodhyd.2022.108139>
- Cortez, R., Luna-Vital, D. A., Margulis, D., & Gonzalez de Mejia, E. (2016). Natural pigments: Stabilization methods of anthocyanins for food applications. *Comprehensive Reviews in Food Science and Food Safety*, 16(1), 180–198. <https://doi.org/10.1111/1541-4337.12244>

- Culetu, A., Susman, I. E., Duta, D. E., & Belc, N. (2021). Nutritional and functional properties of gluten-free flours. *Applied Sciences*, 11(14), 6283. <https://doi.org/10.3390/app11146283>
- Czubinski, J., & Dwiecki, K. (2016). A review of methods used for investigation of protein-phenolic compound interactions. *International Journal of Food Science & Technology*, 52(3), 573–585. <https://doi.org/10.1111/ijfs.13339>
- Danalache, F., Beirão-da-Costa, S., Mata, P., Alves, V. D., & Moldão-Martins, M. (2014). Texture, microstructure and consumer preference of mango bars jellified with gellan gum. *LWT*, 62(1), 584–591. <https://doi.org/10.1016/j.lwt.2014.12.040>
- de Aguiar, L. A., Melo, L., & de Lacerda de Oliveira, L. (2018). Validation of rapid descriptive sensory methods against conventional descriptive analyses: A systematic review. *Critical Reviews in Food Science and Nutrition*, 59(16), 2535–2552. <https://doi.org/10.1080/10408398.2018.1459468>
- de Aguiar, L. A., Rodrigues, D. B., Queiroz, V. A. V., Melo, L., & Pineli, L. de L. de O. (2020). Comparison of two rapid descriptive sensory techniques for profiling and screening of drivers of liking of sorghum breads. *Food Research International*, 131, 108999. <https://doi.org/10.1016/j.foodres.2020.108999>
- de Erive, M. O., He, F., Wang, T., & Chen, G. (2020). Development of β -glucan enriched wheat bread using soluble oat fiber. *Journal of Cereal Science*, 95, 103051. <https://doi.org/10.1016/j.jcs.2020.103051>
- de Erive, M. O., Wang, T., He, F., & Chen, G. (2020). Development of high-fiber wheat bread using microfluidized corn bran. *Food Chemistry*, 310, 125921. <https://doi.org/10.1016/j.foodchem.2019.125921>
- Demirkesen, I., Lee, S., & Mert, B. (2023). Baked products. In M. Â. P. R. Cerqueira & L. M. P. Castro (Eds.), *Fat Mimetics for Food Applications*. Wiley Online Library.

- Dessev, T., Lalanne, V., Keramat, J., Jury, V., Prost, C. P., & Le-Bail, A. (2020). Influence of baking conditions on bread characteristics and acrylamide concentration. *Journal of Food Science and Nutrition Research*, 3, 291–310.
- Destarianto, P., Riskiawan, H. Y., Agustianto, K., & Kautsar, S. (2017). Developing food sensory test system with preference test (Hedonic and Hedonic quality) wheat bread case study. 2017 *International Conference on Sustainable Information Engineering and Technology (SIET)*. <https://doi.org/10.1109/siet.2017.8304177>
- Di Cairano, M., Condelli, N., Galgano, F., & Caruso, M. C. (2021). Experimental gluten-free biscuits with underexploited flours versus commercial products: Preference pattern and sensory characterisation by Check All That Apply Questionnaire. *International Journal of Food Science & Technology*, 57(4), 1936–1944. <https://doi.org/10.1111/ijfs.15188>
- Dilawari, R., Kaur, N., Priyadarshi, N., Prakash, I., Patra, A., Mehta, S., Singh, B. M., Jain, P., & Islam, A. (2022). Soybean: A key player for global food security. Springer EBooks, 1–46. https://doi.org/10.1007/978-3-031-12232-3_1
- Diniz, R. C., Coura, F. M., & Rodrigues, J. F. (2020). Effect of different gluten-free flours on the sensory characteristics of a vegan alfajor: Vegan gluten-free Alfajor development. *Food Science and Technology International*, 27(2), 108201322093979. <https://doi.org/10.1177/1082013220939792>
- Djordjević, M., Djordjević, M., Šoronja-Simović, D., Nikolić, I., & Šereš, Z. (2021). Delving into the Role of Dietary Fiber in Gluten-Free Bread Formulations: Integrating Fundamental Rheological, Technological, Sensory, and Nutritional Aspects. *Polysaccharides*, 3(1), 59–82. <https://doi.org/10.3390/polysaccharides3010003>
- Dohlman, E., Hansen, J., & Boussios, D. (2022). *USDA Agricultural Projections to 2031* (pp. 1–106). United States Department of Agriculture.

- Dong, C., Huang, L., Xiong, C., Li, M., & Tang, J. (2025). Evaluation of quality of baguette bread using image analysis technique. *Journal of Food Composition and Analysis*, 140, 107222. <https://doi.org/10.1016/j.jfca.2025.107222>
- Dong, T. (2020). *Spray drying of kefir with encapsulating agents to mitigate undesirable volatile flavor compounds* [Master's Thesis].
- Dong, Y., Fliss, I., & Karboune, S. (2024). Investigation of *in situ* and *ex situ* mode of LAB incorporation and the effect on dough viscoelasticity, bread texture, and overall physical quality postbaking. *ACS Food Science & Technology*, 4(2), 316–332. <https://doi.org/10.1021/acsfoodscitech.3c00387>
- Dong, Y., & Karboune, S. (2021). A review of bread qualities and current strategies for bread bioprotection: Flavor, sensory, rheological, and textural attributes. *Comprehensive Reviews in Food Science and Food Safety*, 20(2), 1937–1981. <https://doi.org/10.1111/1541-4337.12717>
- Drake, M. A., Watson, M. E., & Liu, Y. (2023). Sensory analysis and consumer preference: Best practices. *Annual Review of Food Science and Technology*, 14(1), 427–448. <https://doi.org/10.1146/annurev-food-060721-023619>
- Dubey, A., Gupta, V., & Tripathy, P. P. (2025). Exploring compositional and technological strategies to enhance the quality of millet-based bread: An overview of current and prospective outlooks. *Food Reviews International*, 1–45. <https://doi.org/10.1080/87559129.2025.2453614>
- Eissa, H., Shedeed, N., Ramadan, mostafa, & Ibrahim, W. (2024). Studies of Texture Profile Analysis (TPA), Physical and Sensory Attributes in Wheat and Cauliflower Flour Biscuits. *Egyptian Journal of Chemistry*, 0(0). <https://doi.org/10.21608/ejchem.2024.268251.9294>
- El-Gammal, R., Ghoneim, G., & ElShehawy, Sh. (2016). Effect of moringa leaves powder (*Moringa oleifera*) on some chemical and physical properties of pan bread. *Journal of Food and Dairy Sciences*, 7(7), 307–314. <https://doi.org/10.21608/jfds.2016.46005>
- Encina-Zelada, C. R., Cadavez, V., Monteiro, F., Teixeira, J. A., & Gonzales-Barron, U. (2018). Physicochemical and textural quality attributes of gluten-free bread formulated with guar

- gum. *European Food Research and Technology*, 245(2), 443–458.
<https://doi.org/10.1007/s00217-018-3176-3>
- Erem, F. (2023). Physicochemical, sensory, and bioactive properties of gluten-free puddings produced with aronia derivatives. *GIDA / the JOURNAL of FOOD*, 48(2), 243–255.
<https://doi.org/10.15237/gida.gd22081>
- Ervina, E. (2023). The sensory profiles and preferences of gluten-free cookies made from alternative flours sourced from Indonesia. *International Journal of Gastronomy and Food Science*, 33, 100796–100796. <https://doi.org/10.1016/j.ijgfs.2023.100796>
- Esposito, M., Battacchi, D., Castigliero, T., Lovatti, E., Re, M., Nava, C., Rizzo, M., Rondena, M., Papini, A., Pettinaroli, C., Pignatelli, D., Salvi, S., Tomasi, M., Scarafoni, A., & Scaglia, B. (2024). Insoluble residues from soybean, rice, oat and almond -based beverage: Landscape of the product category, chemical characterisation and valorization in the food industry. *Trends in Food Science & Technology*, 152, 104669. <https://doi.org/10.1016/j.tifs.2024.104669>
- Fabela-Morón, M. F. (2024). Bioactive compounds, sensory attributes, and flavor perceptions involved in taste-active molecules in fruits and vegetables. *Frontiers in Nutrition*, 11. <https://doi.org/10.3389/fnut.2024.1427857>
- Fact.MR. (2023). *Gluten-free Bread Market* (p. 170). Fact.MR.
- Fan, X., Li, S., Zhang, A., Chang, H., Zhao, X., Lin, Y., & Feng, Z. (2021). Mechanism of change of the physicochemical characteristics, gelation process, water state, and microstructure of okara tofu analogues induced by high-intensity ultrasound treatment. *Food Hydrocolloids*, 111, 106241. <https://doi.org/10.1016/j.foodhyd.2020.106241>
- Fan, Y.-C., Yu, M., Li, D., Zhao, G., Zhang, M., Wang, Z., Liu, Y., & Zhou, D. (2023). Effects of non-enzymatic browning and lipid oxidation on color of ready-to-eat abalone during accelerated storage and its control. *Foods*, 12(7), 1514–1514. <https://doi.org/10.3390/foods12071514>

- Fardet, A. (2015). Wheat-based foods and non celiac gluten/wheat sensitivity: Is drastic processing the main key issue? *Medical Hypotheses*, 85(6), 934–939. <https://doi.org/10.1016/j.mehy.2015.09.007>
- Faria, S., Giordani, M. A., Arcas, S., Fernanda, D., Cristina, A., Jacqueline, & Miguel. (2017). Novel soybean-based high protein bar rich in isoflavones improves insulin sensitivity in diabetic Wistar rats. *Journal of Food Science and Technology*, 55(1), 21–32. <https://doi.org/10.1007/s13197-017-2753-y>
- Fernández-Peláez, J., Guerra, P., Gallego, C., & Gomez, M. (2021). Physical properties of flours obtained from wasted bread crusts and crumbs. *Foods*, 10(2), 282. <https://doi.org/10.3390/foods10020282>
- Feng, J.-Y., Wang, R., Thakur, K., Ni, Z.-J., Zhu, Y.-Y., Hu, F., Zhang, J.-G., & Wei, Z.-J. (2021). Evolution of okara from waste to value added food ingredient: An account of its bio-valorization for improved nutritional and functional effects. *Trends in Food Science & Technology*, 116, 669–680. <https://doi.org/10.1016/j.tifs.2021.08.011>
- Foschia, M., Beraldo, P., & Peressini, D. (2016). Evaluation of the physicochemical properties of gluten-free pasta enriched with resistant starch. *Journal of the Science of Food and Agriculture*, 97(2), 572–577. <https://doi.org/10.1002/jsfa.7766>
- Foschia, M., Horstmann, S., Arendt, E. K., & Zannini, E. (2016). Nutritional therapy – Facing the gap between coeliac disease and gluten-free food. *International Journal of Food Microbiology*, 239, 113–124. <https://doi.org/10.1016/j.ijfoodmicro.2016.06.014>
- Fraiman, D., & Fraiman, R. (2018). An ANOVA approach for statistical comparisons of brain networks. *Scientific Reports*, 8(1). <https://doi.org/10.1038/s41598-018-23152-5>
- Frakolaki, G., Giannou, V., & Tzia, C. (2020). The properties and breadmaking potential of freshly baked and frozen bakery products during partial replacement of wheat flour with spelt flour.

- Food Science and Technology International*, 26(6), 485–492.
<https://doi.org/10.1177/1082013220905379>
- Gabriel, D., Pfitzner, C., Haase, N. U., Hüsken, A., Prüfer, H., Greef, J.-M., & Rühl, G. (2017). New strategies for a reliable assessment of baking quality of wheat – Rethinking the current indicator protein content. *Journal of Cereal Science*, 77, 126–134.
<https://doi.org/10.1016/j.jcs.2017.08.002>
- Galler, M., Tormod Næs, Almli, V. L., & Varela, P. (2020). How children approach a CATA test influences the outcome. Insights on ticking styles from two case studies with 6–9-year old children. *Food Quality and Preference*, 86, 104009–104009.
<https://doi.org/10.1016/j.foodqual.2020.104009>
- Gao, J., Jocelyn, Lim, J. C.-S., Henry, J., & Zhou, W. (2015). Influence of bread structure on human oral processing. *Journal of Food Engineering*, 167, 147–155.
<https://doi.org/10.1016/j.jfoodeng.2015.07.022>
- Gao, J., Ong, J. J.-X., Henry, J., & Zhou, W. (2017). Physical breakdown of bread and its impact on texture perception: A dynamic perspective. *Food Quality and Preference*, 60, 96–104.
<https://doi.org/10.1016/j.foodqual.2017.03.014>
- Gao, J., Wang, Y., Dong, Z., & Zhou, W. (2017). Structural and mechanical characteristics of bread and their impact on oral processing: a review. *International Journal of Food Science & Technology*, 53(4), 858–872. <https://doi.org/10.1111/ijfs.13671>
- García-Gómez, B., Fernández-Canto, N., Vázquez-Odériz, M. L., Quiroga-García, M., Muñoz-Ferreiro, N., & Romero-Rodríguez, M. Á. (2022). Sensory descriptive analysis and hedonic consumer test for Galician type breads. *Food Control*, 134, 108765.
<https://doi.org/10.1016/j.foodcont.2021.108765>
- Ghaitaranpour, A., Mohebbi, M., & Koocheki, A. (2025). An innovative agent-based technique for determination of tortuosity in porous materials – case study: Bread and bread dough. *Current Research in Food Science*, 10, 100995–100995. <https://doi.org/10.1016/j.crfs.2025.100995>

- Giannoutsos, K., Zalidis, A. P., Koukoumaki, D. I., Menexes, G., Mourtzinis, I., Sarris, D., & Gkatzionis, K. (2023). Production of functional crackers based on non-conventional flours. Study of the physicochemical and sensory properties. *Food Chemistry Advances*, 2, 100194. <https://doi.org/10.1016/j.focha.2023.100194>
- Gil, M. F. H., Mikla, M., Llor, A. M. S., Valcárcel, M. D. R., Ibáñez-López, F. J., & Montesinos, M. J. L. (2022). Multicenter application of a nursing workload measurement scale in adult hospitalization units. *International Journal of Nursing Sciences*, 9(4), 460–466. <https://doi.org/10.1016/j.ijnss.2022.09.011>
- Giménez-Bastida, J. A., Piskula, M., & Zieliński, H. (2015). Recent advances in development of gluten-free buckwheat products. *Trends in Food Science & Technology*, 44(1), 58–65. <https://doi.org/10.1016/j.tifs.2015.02.013>
- Guimarães, R. M., Silva, T. E., Lemes, A. C., Boldrin, M. C. F., da Silva, M. A. P., Silva, F. G., & Egea, M. B. (2018). Okara: A soybean by-product as an alternative to enrich vegetable paste. *LWT*, 92, 593–599. <https://doi.org/10.1016/j.lwt.2018.02.058>
- Haase, J., & Wiedmann, K.-P. (2018). The sensory perception item set (SPI): An exploratory effort to develop a holistic scale for sensory marketing. *Psychology & Marketing*, 35(10), 727–739. <https://doi.org/10.1002/mar.21130>
- Hamid, M. A., Zean, F. S., Hong, Y. C., & Sugianto. (2023). Effect of okara on physicochemical and sensory properties of soda cracker. *Bulletin of Culinary Art and Hospitality*, 3(1), 5–12.
- Han, W., Ma, S., Li, L., Zheng, X., & Wang, X. (2019). Impact of wheat bran dietary fiber on gluten and gluten-starch microstructure formation in dough. *Food Hydrocolloids*, 95, 292–297. <https://doi.org/10.1016/j.foodhyd.2018.10.033>
- Hariadi, H., Anggara, C. E. W., Fizriani, A., Judiono, Quddus, A. A., Widiawati, Wibawa, I., Susilo, A., Sulistyawati, E. Y. E., & Fauziyyah, A. (2023). Characteristics of brownies from mocaf flour (modified cassava flour) and black soybean flour (*Glycine soja*). *Applied Research in Science and Technology*, 3(1), 15–30. <https://doi.org/10.33292/areste.v3i1.35>

- Hariono, B., Brilliantina, A., Kautsar, S., Wijaya, R., & Kurnianto, M. F. (2024). The quality improvement of soy milk by applying high pulsed electric field (HPEF) technology. *AIP Conference Proceedings*, 3236, 020033–020033. <https://doi.org/10.1063/5.0225025>
- Hasanuzzaman, M., Nahar, K., Rahman, A., Mahmud, J. A., Hossain, M. S., & Fujita, M. (2016). Soybean production and environmental stresses. Elsevier EBooks, 61–102. <https://doi.org/10.1016/b978-0-12-801535-3.00004-8>
- Henrique, N. A., Deliza, R., & Rosenthal, A. (2014). Consumer sensory characterization of cooked ham using the check-all-that-apply (CATA) methodology. *Food Engineering Reviews*, 7(2), 265–273. <https://doi.org/10.1007/s12393-014-9094-7>
- Herwansyah, Erwansyah, K., & Hafizah. (2020). *Implementasi data mining mengestimasi jumlah produksi roti tawar dan roti tawar kupas berdasarkan transaksi pada 32 toko retail di Sumatera utara dengan menggunakan metode regresi linier berganda pada PT. Arma Anugrah Abadi* [Data mining implementation at bread and decrusted bread production based on transactions at 32 retail markets in North Sumatra using double linear regression method at Arma Anugrah Abadi, LLC.]. *Jurnal Cyber Tech*, 1(2), 1–7. <https://doi.org/10.53513/jct.v1i2.2384>
- Heuven, L. A. J., Dekker, M., Renzetti, S., & Bolhuis, D. P. (2024). The eating rate of bread predicted from its sensory texture and physical properties. *Food & Function*, 15. <https://doi.org/10.1039/d4fo04297b>
- Higa, F. A., Boyd, L., Sopiwnyk, E., & Nickerson, M. T. (2022). Effect of particle size, flour:water ratio and type of pulse on the physicochemical and functional properties of wet protein extraction. *Cereal Chemistry*, 99(5), 1049–1062. <https://doi.org/10.1002/cche.10552>
- Horstmann, S., Lynch, K., & Arendt, E. (2017). Starch characteristics linked to gluten-free products. *Foods*, 6(4), 29. <https://doi.org/10.3390/foods6040029>

- Hosseini, H., Bolourian, S., & Shahidi, F. (2019). Extending the shelf-life of sponge cake by an optimized level of jujube fruit flour determined using custom mixture design. *British Food Journal*, 121(12), 3208–3232. <https://doi.org/10.1108/bfj-07-2019-0489>
- Huang, G., Guo, Q., Wang, C., Ding, H., & Cui, S. W. (2016). Fenugreek fibre in bread: Effects on dough development and bread quality. *Lebensmittel-Wissenschaft & Technologie*, 71, 274–280. <https://doi.org/10.1016/j.lwt.2016.03.040>
- Huang, L., Cai, Y., Su, J., Zhao, M., Zhao, Q., & Van der Meeren, P. (2023). Preparation and characterization of emulsion gels stabilized by adequately preprocessed insoluble soybean fiber from *okara*. *Soft Matter*, 19(22), 4062–4072. <https://doi.org/10.1039/d3sm00189j>
- Huang, Q., Sun, Q., Tang, Z., & Zeng, X. (2023). K₂CO₃ pretreated okara enhances physicochemical, structural, and starch digestion properties in rice tofu, a traditional China snack. *Food Bioscience*, 53, 102611. <https://doi.org/10.1016/j.fbio.2023.102611>
- Huerta, K. da M., Alves, J. dos S., Silva, A. F. C. da, Kubota, E. H., & Rosa, C. S. da. (2016). Sensory response and physical characteristics of gluten-free and gum-free bread with chia flour. *Food Science and Technology*, 36(suppl 1), 15–18. <https://doi.org/10.1590/1678-457x.0032>
- Hunaefi, D., Khairunnisa, W., Sholehuddin, Z., & Adawiyah, D. (2019). Sensory profile of commercial coffee products using QDA (quantitative descriptive analysis), flash profile, and CATA (check-all-that-apply) methods. *Proceedings of the 2nd SEAFast International Seminar*. <https://doi.org/10.5220/0009977500200030>
- Ibadullah, W. Z. W., Mokhtar, F., Abedin, N. H. Z., Ab Rashid, N.-K. M., Ibrahim, N. H., & Mustapha, N. A. (2024). Okara-Fortified wheat bread: Effect on nutritional, physicochemical and sensory properties. *Food Biochemistry, Microbiology, and Biotechnology*, 12(SP1), 110–113.
- Ibidapo, O. P., Henshaw, F. O., Shittu, T. A., & Afolabi, W. A. (2020). Quality evaluation of functional bread developed from wheat, malted millet (*Pennisetum Glaucum*) and “Okara” flour blends. *Scientific African*, 10, e00622. <https://doi.org/10.1016/j.sciaf.2020.e00622>

- Ibrahim, U. K., Salleh, R. M., & Maqsood-ul-Haque, S. N. S. (2015). Bread towards Functional Food: An Overview. *ETP International Journal of Food Engineering*.
<https://doi.org/10.18178/ijfe.1.1.39-43>
- Igual, M., & Martínez-Monzó, J. (2022). Physicochemical properties and structure changes of food products during processing. *Foods*, 11(15), 2365. <https://doi.org/10.3390/foods11152365>
- Ikegaya, A. (2024). Effect of the addition of fats and oils to bread dough on the characteristics of baked bread and simulated food bolus. *J-STAGE*, 57(6), 336–344.
<https://doi.org/10.11402/cookeryscience.57.336>
- Imamura, M., Ito, S., & Arai, E. (2021). Effects of different types of hydrocolloids on the quality improvement of gluten-free rice flour bread made with soymilk. *Food Science and Technology Research*, 27(3), 389–395. <https://doi.org/10.3136/fstr.27.389>
- Ishwarya, S. P., Desai, K. M., Naladala, S., & Anandharamakrishnan, C. (2017). Bran-induced effects on the evolution of bubbles and rheological properties in bread dough. *Journal of Texture Studies*, 48(5), 415–426. <https://doi.org/10.1111/jtxs.12244>
- Iwamura, L. S., Tridapalli, L. P., Reitz, A., Droval, A. A., Larisa, L., & Hernandez, R. (2022). Sensory description of gluten-free bread using rapid sensory methodologies. *International Journal of Food Science & Technology*, 57(7), 4277–4285. <https://doi.org/10.1111/ijfs.15752>
- Jaeger, S. R., Beresford, M. K., Paisley, A. G., Antúnez, L., Vidal, L., Cadena, R. S., Giménez, A., & Ares, G. (2015). Check-all-that-apply (CATA) questions for sensory product characterization by consumers: Investigations into the number of terms used in CATA questions. *Food Quality and Preference*, 42, 154–164. <https://doi.org/10.1016/j.foodqual.2015.02.003>
- Jaeger, S. R., Chheang, S. L., Jin, D., Ryan, G. S., & Ares, G. (2023). How do CATA questions work? Relationship between likelihood of selecting a term and perceived attribute intensity. *Journal of Sensory Studies*, 38(4). <https://doi.org/10.1111/joss.12833>

- Jamanca-Gonzales, N. C., Ocrospoma-Dueñas, R. W., Quintana-Salazar, N. B., Siche, R., & Silva-Paz, R. J. (2022). Influence of preferments on the physicochemical and sensory quality of traditional panettone. *Foods*, 11(17), 2566. <https://doi.org/10.3390/foods11172566>
- Jariyah, Hidayat, A. W., & Munarko, H. (2023). Sensory profile characterization of non-wheat flour biscuits using rate-all that-apply (RATA) and emotional sensory mapping (ESM) method. *Future Foods*, 9, 100281–100281. <https://doi.org/10.1016/j.fufo.2023.100281>
- Jha, P. K., Chevallier, S., Cheio, J., Rawson, A., & Le-Bail, A. (2017). Impact of resting time between mixing and shaping on the dough porosity and final cell distribution in sandwich bread. *Journal of Food Engineering*, 194, 15–23. <https://doi.org/10.1016/j.jfoodeng.2016.07.016>
- Jiang, Y., Zhao, Y., Zhu, Y., Qin, S., Deng, Y., & Zhao, Y. (2019). Effect of dietary fiber-rich fractions on texture, thermal, water distribution, and gluten properties of frozen dough during storage. *Food Chemistry*, 297, 124902. <https://doi.org/10.1016/j.foodchem.2019.05.176>
- Joch, M., Döhring, F. R., Maurer, L. K., & Müller, H. (2018). Inference statistical analysis of continuous data based on confidence bands—Traditional and new approaches. *Behavior Research Methods*, 51(3), 1244–1257. <https://doi.org/10.3758/s13428-018-1060-5>
- Jorge, É. da C., Mendes, A. C. G., Auriema, B. E., Cazedey, H. P., Fontes, P. R., Ramos, A. de L. S., & Ramos, E. M. (2015). Application of a check-all-that-apply question for evaluating and characterizing meat products. *Meat Science*, 100, 124–133. <https://doi.org/10.1016/j.meatsci.2014.10.002>
- Jost, T., Henning, C., Heymann, T., & Glomb, M. A. (2021). Comprehensive analyses of carbohydrates, 1,2-dicarbonyl compounds, and advanced glycation end products in industrial bread making. *Journal of Agricultural and Food Chemistry*, 69(12), 3720–3731. <https://doi.org/10.1021/acs.jafc.0c07614>
- Kamble, D. B., & Rani, S. (2020). Bioactive components, in vitro digestibility, microstructure and application of soybean residue (okara): A review. *Legume Science*, 2(1). <https://doi.org/10.1002/leg3.32>

- Kang, W., Feng, Y., Liu, C., & Blumenfeld, R. (2018). Archimedes' law explains penetration of solids into granular media. *Nature Communications*, 9(1). <https://doi.org/10.1038/s41467-018-03344-3>
- Karim, A., Osse, E. F., & Khalloufi, S. (2025). Innovative strategies for valorization of byproducts from soybean industry: A review on status, challenges, and sustainable approaches towards zero-waste processing systems. *Heliyon*, 11(3), e42118. <https://doi.org/10.1016/j.heliyon.2025.e42118>
- Katunzi-Kilewela, A., Mongi, R. J., Kaale, L. D., Kibazohi, O., Fortunatus, R. M., & Rweyemamu, L. M. (2022). Sensory profile, consumer acceptability and preference mapping of cassava-chia seeds composite porridges. *Applied Food Research*, 2(1), 100038. <https://doi.org/10.1016/j.afres.2021.100038>
- Kaur, S., Kumar, K., Singh, L., Sharanagat, V. S., Nema, P. K., Mishra, V., & Bhushan, B. (2022). Gluten-free grains: Importance, processing and its effect on quality of gluten-free products. *Critical Reviews in Food Science and Nutrition*, 1–28. <https://doi.org/10.1080/10408398.2022.2119933>
- Khatun, N. (2021). Applications of normality test in statistical analysis. *Open Journal of Statistics*, 11(01), 113–122. <https://doi.org/10.4236/ojs.2021.111006>
- Kim, M.-R., Kim, K.-P., & Chung, S.-J. (2019). Utilizing hedonic frame for projective mapping: A case study with Korean fermented soybean paste soup. *Food Quality and Preference*, 71, 279–285. <https://doi.org/10.1016/j.foodqual.2018.07.014>
- Kim, Y. Y., & Hong, J. (2023). Effects of aroma–taste interaction on the sensory attributes of rebaudiosides in soymilk and milk. *Journal of the Science of Food and Agriculture*, 103(15), 7445–7454. <https://doi.org/10.1002/jsfa.12824>
- Kinner, M., Rüegg, R., Weber, C. A., Buchli, J., Durrer, L., & Müller, N. (2021). Impact of selected baking and vacuum cooling parameters on the quality of toast bread. *Journal of Food Science and Technology*, 58. <https://doi.org/10.1007/s13197-020-04945-x>

- Kiriktaş, H., Şahin, M., Eslek, S., & Kiriktaş, İ. (2018). A new approach to determine the density of liquids and solids without measuring mass and volume: Introducing the solidensimeter. *Physics Education*, 53(3), 035009. <https://doi.org/10.1088/1361-6552/aaa91e>
- Kiumarsi, M., Shahbazi, M., Yeganehzad, S., Majchrzak, D., Lieleg, O., & Winkeljann, B. (2019). Relation between structural, mechanical and sensory properties of gluten-free bread as affected by modified dietary fibers. *Food Chemistry*, 277, 664–673. <https://doi.org/10.1016/j.foodchem.2018.11.015>
- Kłosok, K., Welc, R., Fornal, E., & Nawrocka, A. (2021). Effects of Physical and Chemical Factors on the Structure of Gluten, Gliadins and Glutenins as Studied with Spectroscopic Methods. *Molecules*, 26(2), 508. <https://doi.org/10.3390/molecules26020508>
- Kolev, T., Chocgkov, R., & Zlatev, Z. (n.d.). Influence of black chokeberry (>i?Aronia melanocarpa L.) addition on the main characteristics of bread. *Bulgarian Journal of Agricultural Science*, 30(6), 1114–1127.
- Komeroski, M. R., Homem, R. V., Schmidt, H. de O., Rockett, F. C., de Lira, L., Vitória da Farias, D., Kist, T. L., Doneda, D., Rios, A. de O., & Ruffo de Oliveira, V. (2021). Effect of whey protein and mixed flours on the quality parameters of gluten-free breads. *International Journal of Gastronomy and Food Science*, 24, 100361. <https://doi.org/10.1016/j.ijgfs.2021.100361>
- Koo, W.-T., Hong, Y., Joung, D., & Kim, C. (2022). Surface hydration of fibrous filters by using water-absorbing metal–organic frameworks for efficient ultrafine particulate matter removal. *Chemical Engineering Journal*, 446, 136710–136710. <https://doi.org/10.1016/j.cej.2022.136710>
- Kraithong, S., Lee, S., & Rawdkuen, S. (2018). Physicochemical and functional properties of Thai organic rice flour. *Journal of Cereal Science*, 79, 259–266. <https://doi.org/10.1016/j.jcs.2017.10.015>

- Krissetiana, H., Kiswanto, Y., & Suyanto, R. (2020). Perlakuan proofing terhadap sifat sensoris roti mocaf [Proofing treatments towards the sensorial property of mocaf bread]. *Jurnal Teknologi Dan Industri Pangan*, 5(1). <https://doi.org/10.33061/jitipari.v5i1.3638>
- Kumar, S., Sohu, V. S., Gupta, S. K., Singh, R. P., & Bains, N. S. (2018). Understanding the chapati making attributes of the Indian wheats – I: The physico-chemical basis. *Journal of Applied and Natural Science*, 10(2), 572–592. <https://doi.org/10.31018/jans.v10i2.1739>
- Kumar, V., Rani, A., & Husain, L. (2016). Investigations of amino acids profile, fatty acids composition, isoflavones content and antioxidative properties in soy okara. *Asian Journal of Chemistry*, 28(4), 903–906. <https://doi.org/10.14233/ajchem.2016.19548>
- Kurppa, K., Mulder, C., Stordal, K., & Kaukinen, K. (2024). Celiac disease affects 1% of global population—who will manage all these patients? What are criteria to prioritize along risk for complications? *Gastroenterology*. <https://doi.org/10.1053/j.gastro.2023.12.026>
- Kwak, S. G., & Kim, J. H. (2017). Central limit theorem: The cornerstone of modern statistics. *Korean Journal of Anesthesiology*, 70(2), 144–156. <https://doi.org/10.4097/kjae.2017.70.2.144>
- Kwon, Y., Ryu, J., & Ju, S. (2021). Sensory attributes of buckwheat jelly (memilmuk) with mung bean starch added to improve texture and taste. *Foods*, 10(11), 2860. <https://doi.org/10.3390/foods10112860>
- Lahue, C., Madden, A. A., Dunn, R. R., & Smukowski Heil, C. (2020). History and domestication of *Saccharomyces cerevisiae* in bread baking. *Frontiers in Genetics*, 11(584718). <https://doi.org/10.3389/fgene.2020.584718>
- Lalla, M. (2016). Fundamental characteristics and statistical analysis of ordinal variables: A review. *Quality & Quantity*, 51(1), 435–458. <https://doi.org/10.1007/s11135-016-0314-5>
- Lao, Y., Ye, Q., Wang, Y., & Selomulya, C. (2024). Modulating digestibility and mitigating beany flavor of pea protein. *Food Reviews International*, 40(9), 1–30. <https://doi.org/10.1080/87559129.2024.2346329>

- Lawless, H. T., & Heymann, H. (2010). *Sensory evaluation of food : Principles and practices* (Second edition). Springer, Cop.
- Le, T. A. N., & Chen, W. N. (2025). Microencapsulation of *Lactobacillus plantarum* by avocado seed-type 3 resistant starch and okara protein isolate. *Food Chemistry Advances*, 7, 100964–100964. <https://doi.org/10.1016/j.focha.2025.100964>
- Lee, D. P. S., Gan, A. X., & Kim, J. E. (2020). Incorporation of biovalorised okara in biscuits: Improvements of nutritional, antioxidant, physical, and sensory properties. *LWT*, 134, 109902. <https://doi.org/10.1016/j.lwt.2020.109902>
- Lesa, K. N., Ahmad, N., Mayangsari, Y., Khandaker, M. U., Rashed, M., Nur, L., & Hassan, M. (2023). Health benefits of okara for the management of diabetes mellitus. *Journal of Food Quality*, 2023, 1–11. <https://doi.org/10.1155/2023/5540118>
- Lestari, D., Kresnowati, M. T. A. P., Rahmani, A., Aliwarga, L., & Bindar, Y. (2019). Effect of hydrocolloid on characteristics of gluten free bread from rice flour and fermented cassava flour (Fercaf). *Reaktor*, 19(3), 89–95. <https://doi.org/10.14710/reaktor.19.3.89-95>
- Li, C., Wu, A., Yu, W., Hu, Y., Gilbert, R. G., Zhang, C., & Liu, Q. (2020). Parameterizing starch chain-length distributions for structure-property relations. *Carbohydrate Polymers*, 241, 116390–116390. <https://doi.org/10.1016/j.carbpol.2020.116390>
- Li, W., Zhang, S., Feng, Y., Wang, Z., & Han, H. (2018). Effects of storage time on steamed bread quality and gluten protein structure. *IOP Conference Series Materials Science and Engineering*, 392, 052006–052006. <https://doi.org/10.1088/1757-899x/392/5/052006>
- Lian, H., Luo, K., Gong, Y., Zhang, S., & Serventi, L. (2019). Okara flours from chickpea and soy are thickeners: Increased dough viscosity and moisture content in gluten-free bread. *International Journal of Food Science & Technology*, 55(2), 805–812. <https://doi.org/10.1111/ijfs.14332>

- Litchford, A., Allen, K., Jenkins, C., Timothy, E., & Wray, P. (2024). Increasing access to acceptable and affordable gluten-free baked goods. *Journal of Human Sciences and Extension*, 12(2). <https://doi.org/10.55533/2325-5226.1397>
- Liu, L., Shih, Y. T., Strawderman, R. L., Zhang, D., Johnson, B. A., & Chai, H. (2019). Statistical analysis of zero-inflated nonnegative continuous data: A review. *Statistical Science*, 34(2), 253–279. JSTOR. <https://doi.org/10.2307/26771055>
- Liu, N., Ma, S., Li, L., & Wang, X. (2019). Study on the effect of wheat bran dietary fiber on the rheological properties of dough. *Grain & Oil Science and Technology*, 2(1), 1–5. <https://doi.org/10.1016/j.gaost.2019.04.005>
- Liu, S., Jiang, Y., Xu, B., & Song, J. (2023). Analysis of the effect of rolling speed on the texture properties of noodle dough from water-solid interaction, development of gluten network, and bubble distribution. *Food Chemistry*, 404, 134359–134359. <https://doi.org/10.1016/j.foodchem.2022.134359>
- Llobell, F., Giacalone, D., Labenne, A., & Qannari, E. M. (2019). Assessment of the agreement and cluster analysis of the respondents in a CATA experiment. *Food Quality and Preference*, 77, 184–190. <https://doi.org/10.1016/j.foodqual.2019.05.017>
- Losurdo, G., Principi, M., Iannone, A., Amoroso, A., Ierardi, E., Leo, A. D., & Barone, M. (2018). Extra-intestinal manifestations of non-celiac gluten sensitivity: An expanding paradigm. *World Journal of Gastroenterology*, 24(14), 1521–1530. <https://doi.org/10.3748/wjg.v24.i14.1521>
- Lu, F., Cui, Z., Liu, Y., & Li, B. (2013). The effect of okara on the qualities of noodle and steamed bread. *Advance Journal of Food Science and Technology*, 5(7), 960–968.
- Luga, M., Boestean, O., Ghendov-Mosanu, A., & Mironeasa, S. (2020). Impact of dairy ingredients on wheat flour dough rheology and bread properties. *Foods*, 9(6), 828. <https://doi.org/10.3390/foods9060828>

- Lutter, L., Jöudu, I., & Anderson, H. (2023). Volatile organic compounds and their generation in sourdough. *Agronomy Research*, 21(Special issue 2), 504–536. <https://doi.org/10.15159/ar.23.017>
- Ma, M., Mu, T., Sun, H., & Zhou, L. (2022). Evaluation of texture, retrogradation enthalpy, water mobility, and anti-staling effects of enzymes and hydrocolloids in potato steamed bread. *Food Chemistry*, 368, 130686–130686. <https://doi.org/10.1016/j.foodchem.2021.130686>
- Ma, W., Huang, H., Zheng, B., Xie, J., Chen, Y., Xie, J., Dong, R., Hu, X., & Yu, Q. (2025). Effect of modified grapefruit peel dietary fiber on bread: Baking quality, flavor characteristics, and starch digestive properties. *Food Hydrocolloids*, 162, 110964. <https://doi.org/10.1016/j.foodhyd.2024.110964>
- Magano, N., du Rand, G., & de Kock, H. (2022). Perception of gluten-free bread as influenced by information and health and taste attitudes of millennials. *Foods*, 11(4), 491. <https://doi.org/10.3390/foods11040491>
- Mahalapbutr, P., Darai, N., Panman, W., Opasmahakul, A., Kungwan, N., Hannongbua, S., & Rungrotmongkol, T. (2019). Atomistic mechanisms underlying the activation of the G protein-coupled sweet receptor heterodimer by sugar alcohol recognition. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-019-55307-3>
- Mai, H. N. D., Lan, K. P. T., Techapun, C., Leksawasdi, N., Taesuan, S., Hanprom, N., Sompakdee, N., Nunta, R., & Khemacheewakul, J. (2021). Quality evaluation of butter cake prepared by substitution of wheat flour with green soybean (*Glycine max* L.) okara. *Journal of Culinary Science & Technology*, 21(4), 1–14. <https://doi.org/10.1080/15428052.2021.1978363>
- Maina, J. W. (2018). Analysis of the factors that determine food acceptability. *The Pharma Innovation Journal*, 7(5), 253–257.
- Maiuri, L., Vilella, V. R., Piacentini, M., Raia, V., & Kroemer, G. (2019). Defective proteostasis in celiac disease as a new therapeutic target. *Cell Death & Disease*, 10(2). <https://doi.org/10.1038/s41419-019-1392-9>

- Mancebo, C. M., Merino, C., Martínez, M. M., & Gómez, M. (2015). Mixture design of rice flour, maize starch and wheat starch for optimization of gluten free bread quality. *Journal of Food Science and Technology*, 52(10), 6323–6333. <https://doi.org/10.1007/s13197-015-1769-4>
- Mannuramath, M., Yenagi, N., & Orsat, V. (2015). Quality evaluation of little millet (*Panicum miliare*) incorporated functional bread. *Journal of Food Science and Technology*, 52(12), 8357–8363. <https://doi.org/10.1007/s13197-015-1932-y>
- Mano, F., Ikeda, K., Joo, E., Fujita, Y., Yamane, S., Harada, N., & Inagaki, N. (2018). The effect of white rice and white bread as staple foods on gut microbiota and host metabolism. *Nutrients*, 10(9), 1323. <https://doi.org/10.3390/nu10091323>
- Mardiyanto, M., Fadhila, P. T., Nurwahyuningsih, & Rakhmadevi, A. G. (2024). Karakteristik mutu sensoris cookies tinggi serat dengan Substitusi tepung okara. *INNOVATIVE: Journal of Social Research*, 4(2), 1591–1597
- Marques, C., Correia, E., Dinis, L.-T., & Vilela, A. (2022). An Overview of Sensory Characterization Techniques: From Classical Descriptive Analysis to the Emergence of Novel Profiling Methods. *Foods*, 11(3), 255. <https://doi.org/10.3390/foods11030255>
- Martins, R. B., Nunes, M. C., Gouvinhas, I., Ferreira, L. M. M., Peres, J. A., Barros, A. I. R. N. A., & Raymundo, A. (2022). Apple flour in a sweet gluten-free bread formulation: Impact on nutritional value, glycemic index, structure and sensory profile. *Foods*, 11(20), 3172. <https://doi.org/10.3390/foods11203172>
- Martins, Z. E., Pinho, O., & Ferreira, I. M. P. L. V. O. (2017). Fortification of wheat bread with agroindustry by-products: Statistical methods for sensory preference evaluation and correlation with color and crumb structure. *Journal of Food Science*, 82(9), 2183–2191. <https://doi.org/10.1111/1750-3841.13837>

- Martiyanti, A. A., Muani, A., & Radian, R. (2015). Strategi pengembangan agroindustri MOCAF di kota Singkawang. DOAJ (DOAJ: Directory of Open Access Journals), 4(1).
<https://doi.org/10.26418/j.sea.v4i1.10128>
- Masoodi, L., Nissar, J., Ahad, T., & Gull, A. (2024). Bakery, confectionery and beverages as functional foods. Springer EBooks, 249–275. https://doi.org/10.1007/978-3-031-59365-9_12
- Masure, H. G., Fierens, E., & Delcour, J. A. (2016). Current and forward looking experimental approaches in gluten-free bread making research. *Journal of Cereal Science*, 67, 92–111.
<https://doi.org/10.1016/j.jcs.2015.09.009>
- Mathieu, V., Monnet, A.-F., Jourden, S., Panouillé, M., Chappard, C., & Souchon, I. (2016). Kinetics of bread crumb hydration as related to porous microstructure. *Food & Function*, 7(8), 3577–3589. <https://doi.org/10.1039/c6fo00522e>
- Mauer, L. J., & Bradley, R. L. (2017). Moisture and total solids analysis. *Food Science Text Series*, 257–286. https://doi.org/10.1007/978-3-319-45776-5_15
- Melini, V., Vescovo, D., Melini, F., & Raffo, A. (2024). Bakery product enrichment with phenolic compounds as an unexplored strategy for the control of the maillard reaction. *Applied Sciences*, 14(6), 2647. <https://doi.org/10.3390/app14062647>
- Meybodi, N. M., Mohammadifar, M. A., & Feizollahi, E. (2015). Gluten-Free bread quality: A review of the improving factors. *Journal of Food Quality and Hazards Control*, 2(3), 81–85.
<http://jfqhc.ssu.ac.ir/article-1-180-en.html>
- Midway, S., Robertson, M., Flinn, S., & Kaller, M. (2020). Comparing multiple comparisons: Practical guidance for choosing the best multiple comparisons test. *PeerJ*, 8, e10387.
<https://doi.org/10.7717/peerj.10387>
- Mihafu, F. D., Issa, J. Y., & Kamiyango, M. W. (2020). Implication of Sensory Evaluation and Quality Assessment in Food Product Development: A Review. *Current Research in Nutrition and Food Science Journal*, 8(3), 690–702. <https://doi.org/10.12944/crnfsj.8.3.03>

- Mikami, Y., & Murata, M. (2015). Effects of sugar and buffer types, and pH on formation of maillard pigments in the lysine model system. *Food Science and Technology Research*, 21(6), 813–819. <https://doi.org/10.3136/fstr.21.813>
- Mildner-Szkodlarz, S., Róžańska, M. B., Siger, A., Zembruska, J., & Szwengiel, A. (2023). Formation of Maillard reaction products in a model bread system of different gluten-free flours. *Food Chemistry*, 429, 136994–136994. <https://doi.org/10.1016/j.foodchem.2023.136994>
- Miller, C. H., Sheyholislami, H., Burns, J. L., & Connor, K. L. (2023). Sensory evaluations of a novel iron and zinc-enriched powder for the potential treatment and prevention of iron deficiency in women of reproductive age. *Maternal and Child Nutrition*, 20(1). <https://doi.org/10.1111/mcn.13575>
- Mollakhalili-meybodi, N., Sheidaei, Z., Khorshidian, N., Nematollahi, A., & Khanniri, E. (2022). Sensory attributes of wheat bread: a review of influential factors. *Journal of Food Measurement and Characterization*, 17. <https://doi.org/10.1007/s11694-022-01765-9>
- Monteiro, J. S., Farage, P., Zandonadi, R. P., Botelho, R. B. A., de Oliveira, L. de L., Raposo, A., Shakeel, F., Alshehri, S., Mahdi, W. A., & Araújo, W. M. C. (2021). A systematic review on gluten-free bread formulations using specific volume as a quality indicator. *Foods*, 10(3), 614. <https://doi.org/10.3390/foods10030614>
- Moretton, M., Cattaneo, C., Mosca, A. C., Proserpio, C., Anese, M., Pagliarini, E., & Pellegrini, N. (2023). Identification of desirable mechanical and sensory properties of bread for the elderly. *Food Quality and Preference*, 104, 104716. <https://doi.org/10.1016/j.foodqual.2022.104716>
- Morren, S., Ho, Q. T., Stoops, J., Dyck, T. V., Claes, J., Verboven, P., Nicolai, B., & Campenhout, L. V. (2016). Effect of product microstructure and process parameters on modified atmosphere packaged bread. *Food and Bioprocess Technology*, 10, 328–339. <https://doi.org/10.1007/s11947-016-1819-6>

- Mudgil, D., Barak, S., & Khatkar, B. S. (2016). Optimization of bread firmness, specific loaf volume and sensory acceptability of bread with soluble fiber and different water levels. *Journal of Cereal Science*, 70, 186–191. <https://doi.org/10.1016/j.jcs.2016.06.009>
- Mukherjee, R., Chakraborty, R., & Dutta, A. (2016). Role of fermentation in improving nutritional quality of soybean meal — a review. *Asian-Australasian Journal of Animal Sciences*, 29(11), 1523–1529. <https://doi.org/10.5713/ajas.15.0627>
- Mutie, E. C., José, A. E., & Massingue, A. A., Jr., (2022). Sensory acceptance of carrot bread. *International Journal of Scientific Research Updates*, 4(2), 165–172. <https://doi.org/10.53430/ijrsru.2022.4.2.0169>
- Naqash, F., Gani, A., Gani, A., & Masoodi, F. A. (2017). Gluten-free baking: Combating the challenges - A review. *Trends in Food Science & Technology*, 66, 98–107. <https://doi.org/10.1016/j.tifs.2017.06.004>
- Nasir, S., Allai, F. M., Gani, M., Ganaie, S., Gul, K., Jabeen, A., & Majeed, D. (2020). Physical, textural, rheological, and sensory characteristics of amaranth-based wheat flour bread. *International Journal of Food Science*, 2020, 1–9. <https://doi.org/10.1155/2020/8874872>
- Nawaz, A., Danish, A., Ali, S. W., Shahbaz, H. M., Khalifa, I., Ahmed, A., Irshad, S., Ahmad, S., & Ahmed, W. (2021). Evaluation and storage stability of potato chips made from different varieties of potatoes cultivated in Pakistan. *Journal of Food Processing and Preservation*, 45(5). <https://doi.org/10.1111/jfpp.15437>
- Nayak, A., & Bhushan, B. (2019). An overview of the recent trends on the waste valorization techniques for food wastes. *Journal of Environmental Management*, 233, 352–370. <https://doi.org/10.1016/j.jenvman.2018.12.041>
- Nicolas, V., Vanin, F., Grenier, D., Lucas, T., Doursat, C., & Flick, D. (2016). Modeling bread baking with focus on overall deformation and local porosity evolution. *AIChE Journal*, 62(11), 3847–3863. <https://doi.org/10.1002/aic.15301>

- Niedoba, T., Surowiak, A., Hassanzadeh, A., & Khoshdast, H. (2023). Evaluation of the effects of coal jigging by means of Kruskal–Wallis and Friedman tests. *Energies*, 16(4), 1600. <https://doi.org/10.3390/en16041600>
- Nielsen, S. S. (2017). Moisture content determination. *Food Analysis Laboratory Manual*, 105–115. https://doi.org/10.1007/978-3-319-44127-6_10
- Nirmaan, A. M. C., Rohitha Prasantha, B. D., & Peiris, B. L. (2020). Comparison of microwave drying and oven-drying techniques for moisture determination of three paddy (*Oryza sativa* L.) varieties. *Chemical and Biological Technologies in Agriculture*, 7(1). <https://doi.org/10.1186/s40538-019-0164-1>
- Niu, M., Guo, J., Yang, X., & Li, P. (2024). Quality analysis of dough and steamed bread under various freezing conditions. *Journal of Food Science*, 89(7), 4345–4358. <https://doi.org/10.1111/1750-3841.17150>
- Noda, K., Amano, Y., Shimamura, Y., & Murata, M. (2020). Distribution of pyrrolothiazolate, a pigment formed through the maillard reaction between cysteine and glucose, in foods and beverages and some of its properties. *Food Science and Technology Research*, 26(6), 735–742. <https://doi.org/10.3136/fstr.26.735>
- Noriham, A., Ariffaizuddin, R. M., Noorlaila, A., & Zakry, A. N. F. (2016). Potential use of okara as meat replacer in beef sausage. *Jurnal Teknologi*, 78(6), 13–18.
- Ntalios, E., Raphaelides, S., & Marinopoulou, A. (2024). An investigation of changes in the rheological properties of toast pan bread dough during the various processing steps of kneading in an industrial bakery. *Gastronomy*, 2(2), 57–72. <https://doi.org/10.3390/gastronomy2020005>
- Nwobi, F., & Akanno, F. (2021). Power comparison of ANOVA and Kruskal–Wallis tests when error assumptions are violated. *Advances in Methodology and Statistics*, 18(2), 53–7153–71. <https://doi.org/10.51936/ltgt2135>

- Obenland, D., Campisi-Pinto, S., & Arpaia, M. L. (2018). Determinants of sensory acceptability in grapefruit. *Scientia Horticulturae*, 231, 151–157. <https://doi.org/10.1016/j.scienta.2017.12.026>
- Olakanmi, S. J., Jayas, D. S., & Paliwal, J. (2023). Applications of imaging systems for the assessment of quality characteristics of bread and other baked goods: A review. *Comprehensive Reviews in Food Science and Food Safety*, 22(3). <https://doi.org/10.1111/1541-4337.13131>
- Olawoye, B., Fagbohun, O. F., Popoola, O. O., Gbadamosi, S. O., & Akanbi, C. T. (2022). Understanding how different modification processes affect the physiochemical, functional, thermal, morphological structures and digestibility of cardaba banana starch. *International Journal of Biological Macromolecules*, 201, 158–172. <https://doi.org/10.1016/j.ijbiomac.2021.12.134>
- Ospina, Y. A. M., Lionello, M. E., Garófalo, L., Burbano, J. J., Cabezas, D. M., & Correa, M. J. (2023). Effect of ultrasonic treatment on soybean okara to be used as a gluten-free bread improver. *International Journal of Food Science & Technology*, 58(7), 3827–3837. <https://doi.org/10.1111/ijfs.16484>
- Ostermann-Porcel, M. V., Rinaldoni, A. N., Campderrós, M. E., & Gómez, M. (2020). Evaluation of gluten-free layer cake quality made with okara flour. *Journal of Food Measurement and Characterization*, 14(3), 1614–1622. <https://doi.org/10.1007/s11694-020-00409-0>
- Ostermann-Porcel, M. V., Rinaldoni, A. N., Rodriguez-Furlán, L. T., & Campderrós, M. E. (2016). Quality assessment of dried okara as a source of production of gluten-free flour. *Journal of the Science of Food and Agriculture*, 97(9), 2934–2941. <https://doi.org/10.1002/jsfa.8131>
- Osunbade, O. A., Alamu, E. O., Awoyale, W., Adesokan, M., Nwaoliwe, G., Akinwande, B. A., Adejuyitan, J. A., Lungaho, M., & Maziya-Dixon, B. (2025). Consumer perception and sensory profiling of cassava mealiness attributes using hedonic, jar, and cata methods. *Journal of Sensory Studies*, 40(3). <https://doi.org/10.1111/joss.70036>

- Palabiyik, I., Güleri, T., Gunes, R., Öner, B., Toker, O. S., & Konar, N. (2020). A fundamental optimization study on chewing gum textural and sensorial properties: The effect of ingredients. *Food Structure*, 26, 100155. <https://doi.org/10.1016/j.foostr.2020.100155>
- Pambo, K. O., Okello, J. J., Mbeche, R. M., Kinyuru, J. N., & Alemu, M. H. (2018). The role of product information on consumer sensory evaluation, expectations, experiences and emotions of cricket-flour-containing buns. *Food Research International*, 106, 532–541. <https://doi.org/10.1016/j.foodres.2018.01.011>
- Parinduri, D. H., Nurminah, M., & Julianti, E. (2021). Physicochemical and sensory characteristics of bread made from composite flour mocaf, flour and starch from orange sweet potato and breadfruit. *IOP Conference Series: Earth and Environmental Science*, 782(3), 032078. <https://doi.org/10.1088/1755-1315/782/3/032078>
- Parmar, P., Goraya, R. K., & Pathania, S. (2021). Macromolecules interactions in food formulations. In S. Pathania & B. K. Tiwari (Eds.), *Food Formulation: Novel Ingredients and Processing Techniques* (pp. 49–70). Wiley Blackwell.
- Pematilleke, N., Kaur, M., Adhikari, B., & Torley, P. J. (2021). Relationship between instrumental and sensory texture profile of beef semitendinosus muscles with different textures. *Journal of Texture Studies*, 53(2), 232–241. <https://doi.org/10.1111/jtxs.12623>
- Peng, Y., Zhao, Y., Jin, X., Xiong, Y., Dong, J., & Ma, W. (2023). Empirical and theoretical bases of good steamed bread production. *Foods*, 12(3), 433–433. <https://doi.org/10.3390/foods12030433>
- Pepa, L. S., Rodríguez, S. D., Ferreira, C. dos S., & Buera, M. P. (2020). Interpretation of the color due to the ubiquitous nonenzymatic browning phenomena in foods. *Color Research and Application*, 46(2), 446–455. <https://doi.org/10.1002/col.22574>
- Pepa, L. S., Santos-Ferreira, C. dos, & Pilar, del. (2023). Revaluating anion effects on maillard reaction catalysis as a relevant feature for kinetic predictions. *ACS Food Science & Technology*, 3(6), 1021–1029. <https://doi.org/10.1021/acsfoodscitech.3c00029>

- Pereira, D. G., Afonso, A., & Medeiros, F. M. (2014). Overview of friedman's test and post-hoc analysis. *Communications in Statistics - Simulation and Computation*, 44(10), 2636–2653.
<https://doi.org/10.1080/03610918.2014.931971>
- Pešić, M. B., Pešić, M. M., Bezbradica, J., Stanojević, A. B., Ivković, P., Milinčić, D. D., Demin, M., Kostić, A. Ž., Dojčinović, B., & Stanojevic, S. P. (2023). Okara-Enriched gluten-free bread: Nutritional, antioxidant and sensory properties. *Molecules*, 28(10), 4098–4098.
<https://doi.org/10.3390/molecules28104098>
- Phetxumphou, K., Cox, A. N., & Lahne, J. (2020). Development and characterization of a check-all-that-apply (CATA) lexicon for virginia hard (alcoholic) ciders. *Journal of the American Society of Brewing Chemists*, 78(4), 299–307.
<https://doi.org/10.1080/03610470.2020.1768784>
- Phuenpipob, C., Thomthong, D., & Sakdumrong, T. (2016). Utilization from okara to replace wheat flour in ice-cream cone. *Applied Mechanics and Materials*, 848, 107–110.
<https://doi.org/10.4028/www.scientific.net/amm.848.107>
- Pico, J., Martínez, M. M., Bernal, J., & Gómez, M. (2017). Evolution of volatile compounds in gluten-free bread: From dough to crumb. *Food Chemistry*, 227, 179–186.
<https://doi.org/10.1016/j.foodchem.2017.01.098>
- Ping, W., Shengduo, C., Jiarui, W., & Wei, C. (2019). ANOVA statistical significance analysis of clinicopathological characteristics tumor tissue. *Journal of Medical Imaging and Health Informatics*, 10(1), 38–43. <https://doi.org/10.1166/jmihi.2020.2857>
- Pojić, M., Musse, M., Rondeau, C., Hadnađev, M., Grenier, D., Mariette, F., Cambert, M., Diascorn, Y., Quellec, S., Torbica, A., Hadnađev, T. D., & Lucas, T. (2016). Overall and local bread expansion, mechanical properties, and molecular structure during bread baking: Effect of emulsifying starches. *Food and Bioprocess Technology*, 9(8), 1287–1305.
<https://doi.org/10.1007/s11947-016-1713-2>

- Popp, A., & Mäki, M. (2019). Changing pattern of childhood celiac disease epidemiology: Contributing factors. *Frontiers in Pediatrics*, 7. <https://doi.org/10.3389/fped.2019.00357>
- Porcel, M. V. O. P., Campderrós, M. E., & Rinaldoni, A. N. (2017). Effect of okara flour addition on the physical and sensory quality of wheat bread. *MOJ Food Processing & Technology*, 4(6). <https://doi.org/10.15406/mojfpt.2017.04.00111>
- Privatti, R. T., & Rodrigues, C. E. d C. (2021). An overview of the composition, applications, and recovery techniques of the components of okara aimed at the biovalorization of this soybean processing residue. *Food Reviews International*, 39(2), 726–749. <https://doi.org/10.1080/87559129.2021.1926484>
- Pu, D., Duan, W., Huang, Y., Zhang, Y., Sun, B., Ren, F., Zhang, H., Chen, H., He, J., & Tang, Y. (2020). Characterization of the key odorants contributing to retronasal olfaction during bread consumption. *Food Chemistry*, 318, 126520. <https://doi.org/10.1016/j.foodchem.2020.126520>
- Puerta, P., Laguna, L., Villegas, B., Rizo, A., Fiszman, S., & Tarrega, A. (2020). Oral processing and dynamics of texture perception in commercial gluten-free breads. *Food Research International*, 134, 109233. <https://doi.org/10.1016/j.foodres.2020.109233>
- Putri, N. A., Herlina, H., & Subagio, A. (2018). KARAKTERISTIK MOCAF (Modified Cassava Flour) BERDASARKAN METODE PENGGILINGAN DAN LAMA FERMENTASI [Mocaf characteristics based on milling methods and fermentation length]. *Jurnal Agroteknologi*, 12(01), 79. <https://doi.org/10.19184/j-agt.v12i1.8252>
- Qazi, M. W., de Sousa, I. G., Nunes, M. C., & Raymundo, A. (2022). Improving the nutritional, structural, and sensory properties of gluten-free bread with different species of microalgae. *Foods*, 11(3), 397. <https://doi.org/10.3390/foods11030397>

- Qian, X., Gu, Y., Sun, B., Ma, S., Tian, X., & Wang, X. (2022). Improvement in quality of fast-frozen steamed bread by different gluten content and glutenin/gliadin ratio and its mechanism. *LWT*, 153, 112562. <https://doi.org/10.1016/j.lwt.2021.112562>
- Qiu, J., Cai, L., Xiong, S., You, J., Yin, T., & An, Y. (2023). Characterization of aroma profiles and volatile organic compounds in silver carp surimi gel by GC-IMS, SPME-GC-MS, and sensory evaluation: Affected by okara insoluble dietary fiber with varied particle sizes. *Food Chemistry Advances*, 2, 100224–100224. <https://doi.org/10.1016/j.focha.2023.100224>
- Qiu, J., Khalloufi, S., Martynenko, A., Van Dalen, G., Schutyser, M., & Almeida-Rivera, C. (2015). Porosity, bulk density, and volume reduction during drying: Review of measurement methods and coefficient determinations. *Drying Technology*, 33(14), 1681–1699. <https://doi.org/10.1080/07373937.2015.1036289>
- Quintana, G., Gerbino, E., & Gómez-Zavaglia, A. (2018). Valorization of okara oil for the encapsulation of *Lactobacillus plantarum*. *Food Research International*, 106, 81–89. <https://doi.org/10.1016/j.foodres.2017.12.053>
- Rahman, S., Hasan, S., Nitai, A. S., Nam, S., Karmakar, A. K., Ahsan, S., Shiddiky, M. J. A., & Ahmed, M. B. (2021). Recent developments of carboxymethyl cellulose. *Polymers*, 13(8), 1345. <https://doi.org/10.3390/polym13081345>
- Ramadhan, K., Salsabillah, S., Asiah, N., & Cempaka, L. (2024). Impact of okara tempe powder concentration and particle size on color and sensory properties of cookies. *Asia Pacific Journal of Sustainable Agriculture, Food and Energy*, 12(2), 70–76.
- Rathnayake, H. A., Navaratne, S. B., & Navaratne, C. M. (2018). Porous crumb structure of leavened baked products. *International Journal of Food Science*, 2018, 1–15. <https://doi.org/10.1155/2018/8187318>
- Ravi, R., Taheri, A., Khandekar, D., & Millas, R. (2019). Rapid profiling of soybean aromatic compounds using electronic nose. *Biosensors*, 9(2), 66. <https://doi.org/10.3390/bios9020066>

- Ravindran, R., & Jaiswal, A. K. (2016). Exploitation of food industry waste for high-value products. *Trends in Biotechnology*, 34(1), 58–69. <https://doi.org/10.1016/j.tibtech.2015.10.008>
- Razi, S. M., Bagheri, H., Mohammadian, M., Mirarab-Razi, V., & Rashidinejad, A. (2023). Gelation properties of egg white proteins: A review. *Food Reviews International*, 1–24. <https://doi.org/10.1080/87559129.2023.2279587>
- Reißner, A.-M., Beer, A., Struck, S., & Rohm, H. (2020). Pre-Hydrated berry pomace in wheat bread: An approach considering requisite water in fiber enrichment. *Foods*, 9(11), 1600–1600. <https://doi.org/10.3390/foods9111600>
- Rice, S., Tursumbayeva, M., Clark, M., Greenlee, D., Dharmadhikari, M., Fennell, A., & Koziel, J. (2019). Effects of harvest time on the aroma of white wines made from cold-hardy brianna and frontenac gris grapes using headspace solid-phase microextraction and gas chromatography-mass spectrometry-olfactometry. *Foods*, 8(1), 29. <https://doi.org/10.3390/foods8010029>
- Riofrio-Grijalva, R., Lago, M., Fabregat-Amich, P., Guerrero, J., Cuesta, A., & Vázquez-Araújo, L. (2019). Relationship between tactile stimuli and basic tastes: CATA with consumers with visual disability. *Journal of Sensory Studies*, 35(1). <https://doi.org/10.1111/joss.12549>
- Riskó, T. C., Péntek, Á., & Wiwczarowski, T. (2017). Bread consumption habits in the gluten free diet. *Applied Studies in Agribusiness and Commerce*, 11(3-4), 113–120. <https://doi.org/10.19041/apstract/2017/3-4/16>
- Rizka, S. K., Purnamadewi, Y. L., & Hasanah, N. (2018). Produk Roti dalam Pola Konsumsi Pangan dan Keberadaan Label Halal dalam Keputusan Konsumsi Masyarakat (Kasus: Kota Bogor). *Al-Muzara'ah*, 6(1), 15–27. <https://doi.org/10.29244/jam.6.1.15-27>
- Rodriguez, S., Aquino, V. T. P., & Dávila, J. U. (2024). Effect of partial substitution of wheat flour with okara flour in the elaboration of panettone. *22nd LACCEI International Multi-Conference for Engineering, Education, and Technology*, 1. <https://doi.org/10.18687/LACCEI2024.1.1.1910>

- Rodriguez-Amaya, D. B. (2016). Natural food pigments and colorants. *Current Opinion in Food Science*, 7, 20–26. <https://doi.org/10.1016/j.cofs.2015.08.004>
- Roman, L., & Martinez, M. M. (2019). Structural basis of resistant starch (RS) in bread: Natural and commercial alternatives. *Foods*, 8(7), 267. <https://doi.org/10.3390/foods8070267>
- Romulo, A., & Surya, R. (2021). Tempe: A traditional fermented food of Indonesia and its health benefits. *International Journal of Gastronomy and Food Science*, 26, 100413. <https://doi.org/10.1016/j.ijgfs.2021.100413>
- Ronie, M. E., & Mamat, H. (2022). Factors affecting the properties of rice flour: A review. *Food Research*, 6(6), 1–12. [https://doi.org/10.26656/fr.2017.6\(6\).531](https://doi.org/10.26656/fr.2017.6(6).531)
- Roslan, A, K. N., Ismail, N., & Shaharuddin, S. (2021). Sensory attributes and other properties of yogurt fortified with immobilized *Lactobacillus plantarum* and soybean residue (okara). *Ebsco.com*, 16(1), 1. <https://doi.org/10.37290/ijpp2641-7197>
- Rossella, C., Antonio, D., Barbara, S., Angela, R., Barbara, L. G., Mariacinzia, R., Grazia, M., Benedetto, D. R., Antonella, C., Rosaria, V., Rosaria, C. M., & Carla, S. (2025). Insight into the leavening process and structural properties of buns containing okara. *Applied Food Research*, 5(1), 100961–100961. <https://doi.org/10.1016/j.afres.2025.100961>
- Różyło, R., Schönlechner, R., Pichler, E. C., Dziki, D., Matwijczuk, A., Biernacka, B., & Świeca, M. (2023). Innovative high-fiber wheat bread fortified with micronized oat and plantago ovata husks: Spectroscopic and physicochemical characteristics. *Food Chemistry*, 428, 136782–136782. <https://doi.org/10.1016/j.foodchem.2023.136782>
- Rybicka, I., Doba, K., & Bińczak, O. (2019). Improving the sensory and nutritional value of gluten-free bread. *International Journal of Food Science & Technology*, 54(9), 2661–2667. <https://doi.org/10.1111/ijfs.14190>
- Sahda, R. T., & Sri Hartuti. (2025). The process of processing cassava into MOCAF flour. *ROCE : Jurnal Pertanian Terapan*, 2(1). <https://doi.org/10.71275/roce.v2i1.61>

- Sahin, A. W., Wiertz, J., & Arendt, E. K. (2020). Evaluation of a new method to determine the water addition level in gluten-free bread systems. *Journal of Cereal Science*, 93, 102971. <https://doi.org/10.1016/j.jcs.2020.102971>
- Salinas, M. V., & Puppo, M. C. (2018). Bread Staling: Changes During Storage Caused by the Addition of Calcium Salts and Inulin to Wheat Flour. *Food and Bioprocess Technology*, 11(11), 2067–2078. <https://doi.org/10.1007/s11947-018-2167-5>
- Sandri, L. T. B., Santos, F. G., Fratelli, C., & Capriles, V. D. (2017). Development of gluten-free bread formulations containing whole chia flour with acceptable sensory properties. *Food Science & Nutrition*, 5(5), 1021–1028. <https://doi.org/10.1002/fsn3.495>
- Sang, S., Ou, C., Fu, Y., Su, X., Jin, Y., & Xu, X. (2022). Complexation of fish skin gelatin with glutentin and its effect on the properties of wheat dough and bread. *Food Chemistry: X*, 14, 100319. <https://doi.org/10.1016/j.fochx.2022.100319>
- Sañudo-Barajas, J. A., Lipan, L., Cano-Lamadrid, M., de la Rocha, R. V., Noguera-Artiaga, L., Sánchez-Rodríguez, L., Carbonell-Barrachina, Á. A., & Hernández, F. (2019). Texture. *Postharvest Physiology and Biochemistry of Fruits and Vegetables*, 293–314. <https://doi.org/10.1016/b978-0-12-813278-4.00014-2>
- Sattar, Y., Ashishkumar Patel, D., Waheed Khan, K., Kawsara, A., & Daggubati, R. (2025). ANOVA in statistics. In *Translational Cardiology* (pp. 171–174). Academic Press. <https://doi.org/10.1016/B978-0-323-91790-2.00101-5>
- Scheuer, P. M., Luccio, M. D., Zibetti, A. W., de Miranda, M. Z., & de Francisco, A. (2015). Relationship between instrumental and sensory texture profile of bread loaves made with whole-wheat flour and fat replacer. *Journal of Texture Studies*, 47(1), 14–23. <https://doi.org/10.1111/jtxs.12155>
- Schopf, M., & Scherf, K. A. (2021). Water absorption capacity determines the functionality of vital gluten related to specific bread volume. *Foods*, 10(2), 228. <https://doi.org/10.3390/foods10020228>

- Sekretariat Jenderal Kementerian Pertanian. (2023). Statistics of food consumption 2023 pusat data dan sistem informasi pertanian center for agricultural data and information system. https://satudata.pertanian.go.id/assets/docs/publikasi/Buku_Statsitik_Konsumsi_Pangan_2023.pdf
- Seveline, S., Heldyana, R., & Kurniawati, S. (2020). The use of three species of lactic acid bacteria in the mocaf (modified cassava flour) production. *Industria: Jurnal Teknologi Dan Manajemen Agroindustri*, 9(3), 163–172. <https://doi.org/10.21776/ub.industria.2020.009.03.1>
- Sharanagat, V. S., Singh, L., & Nema, P. K. (2022). Approaches for development of functional and low gluten bread from sorghum: A review. *Journal of Food Processing and Preservation*, 46(11). <https://doi.org/10.1111/jfpp.17089>
- Sheika, A. F. E. (2015). Bread: Between the heritage of past and the technology of present. CRC Press EBooks, 11–35. <https://doi.org/10.1201/b18918-4>
- Shen, H., Yan, M., Liu, X., Ge, X., Zeng, J., Gao, H., Zhang, G., & Li, W. (2023). Wheat starch particle size distribution regulates the dynamic transition behavior of gluten at different stages of dough mixing. *International Journal of Biological Macromolecules*, 244, 125371–125371. <https://doi.org/10.1016/j.ijbiomac.2023.125371>
- Shen, Y., Chen, G., & Li, Y. (2018). Bread characteristics and antioxidant activities of Maillard reaction products of white pan bread containing various sugars. *LWT*, 95, 308–315. <https://doi.org/10.1016/j.lwt.2018.05.008>
- Shevchenko, T., Ustinova, Y., Ermolaeva, E., Uzunov, G., & Kolomeets, A. (2024). Enhancing bakery product quality through microwave-activated yeast: An experimental analysis. *International Journal of Biological and Chemical Sciences*, 18(4), 1569–1576. <https://doi.org/10.4314/ijbcs.v18i4.27>
- Shi, M., Wang, F., Lan, P., Zhang, Y., Zhang, M., Yan, Y., & Liu, Y. (2020). Effect of ultrasonic intensity on structure and properties of wheat starch-monoglyceride complex and its influence on quality

- of norther-style Chinese steamed bread. *LWT*, 138, 110677.
<https://doi.org/10.1016/j.lwt.2020.110677>
- Shiby, Y. K., & Tabassum, A. (2021). Sensory evaluation techniques and consumer perception studies for food product innovations. In G. K. Sharma, A. D. Semwal, & D. K. Yadav (Eds.), *Advances in Processing Technology* (pp. 1–29). CRC Press.
- Silva, T. H. L., Monteiro, R. L., Salvador, A. A., Laurindo, J. B., & Carciofi, B. A. M. (2022). Kinetics of bread physical properties in baking depending on actual finely controlled temperature. *Food Control*, 137, 108898. <https://doi.org/10.1016/j.foodcont.2022.108898>
- Singh, P., & Krishnaswamy, K. (2022). Sustainable zero-waste processing system for soybeans and soy by-product valorization. *Trends in Food Science & Technology*, 128, 331–344.
<https://doi.org/10.1016/j.tifs.2022.08.015>
- Sipos, L., Nyitrai, Á., Hitka, G., Friedrich, L. F., & Kókai, Z. (2021). Sensory panel performance evaluation—comprehensive review of practical approaches. *Applied Sciences*, 11(24), 11977.
<https://doi.org/10.3390/app112411977>
- Smith, B. M., Ramsay, S. A., Roe, A., Ferrante, M. J., & Brooks, S. (Worden). (2019). Reducing visual differences in whole grain bread prepared with hard red and hard white wheat: Application for sensory studies. *Journal of Food Science*, 84(8), 2325–2329.
<https://doi.org/10.1111/1750-3841.14722>
- Song, C., Wang, Y., Wang, S., & Cui, Z. (2016). Temperature and moisture dependent dielectric properties of chinese steamed bread using mixture equations related to microwave heating. *International Journal of Food Properties*, 19(11), 2522–2535.
<https://doi.org/10.1080/10942912.2015.1104508>
- Southgate, A. N. N., Scheuer, P. M., Martelli, M. F., Menegon, L., & de Francisco, A. (2017). Quality properties of a gluten-free bread with buckwheat. *Journal of Culinary Science & Technology*, 15(4), 339–348. <https://doi.org/10.1080/15428052.2017.1289134>

- Starowicz, M., & Zieliński, H. (2019). How maillard reaction influences sensorial properties (color, flavor and texture) of food products? *Food Reviews International*, 35(8), 707–725. <https://doi.org/10.1080/87559129.2019.1600538>
- Sulaiman, N. S., Sintang, M. D., Mohd Zaini, H., Munsu, E., Matajun, P., & Pindi, W. (2022). Applications of protein crosslinking in food products. *International Food Research Journal*, 29(4), 723–739. <https://doi.org/10.47836/ifrj.29.4.01>
- Sun, X., Scanlon, M. G., Nickerson, M. T., & Filiz Köksel. (2023). The entrainment and evolution of gas bubbles in bread dough—A review. *Cereal Chemistry*, 100(5), 1031–1047. <https://doi.org/10.1002/cche.10699>
- Sun, Y., Li, C., Li, W., Li, G., Zhang, T., & Miao, M. (2024). Impact of particle size on the functionality of corn-derived dietary fiber-phenolic acid complexes. *International Journal of Biological Macromolecules*, 280, 136044. <https://doi.org/10.1016/j.ijbiomac.2024.136044>
- Sun, Y., Lin, L., & Zhang, P. (2021). Color development kinetics of maillard reactions. *Industrial & Engineering Chemistry Research*, 60(9), 3495–3501. <https://doi.org/10.1021/acs.iecr.1c00026>
- Sun, Y., Ma, Y., Chen, S., Xu, Y., & Tang, K. (2021). Exploring the mystery of the sweetness of baijiu by sensory evaluation, compositional analysis and multivariate data analysis. *Foods*, 10(11), 2843. <https://doi.org/10.3390/foods10112843>
- Susman, I.-E., Culețu, A., Apostol, L., & Popa, M. E. (2020). Trends and challenges in gluten-free baking products ingredients: A review. *Scientific Bulletin. Series F. Biotechnologies*, XXIV(1), 76–83.
- Taghdir, M., Mazloomi, S. M., Honar, N., Sepandi, M., Ashourpour, M., & Salehi, M. (2016). Effect of soy flour on nutritional, physicochemical, and sensory characteristics of gluten-free bread. *Food Science & Nutrition*, 5(3), 439–445. <https://doi.org/10.1002/fsn3.411>
- Taglieri, I., Macaluso, M., Bianchi, A., Sanmartin, C., Quartacci, M. F., Zinnai, A., & Venturi, F. (2020). Overcoming bread quality decay concerns: main issues for bread shelf life as a function of biological leavening agents and different extra-ingredients used in formulation. A review.

- Journal of the Science of Food and Agriculture*, 101(5), 1732–1743.
<https://doi.org/10.1002/jsfa.10816>
- Tang, Y., Huang, Y., Li, M., Zhu, W., Zhang, W., Luo, S., Zhang, Y., Ma, J., & Jiang, Y. (2024). Balancing maillard reaction products formation and antioxidant activities for improved sensory quality and health benefit properties of pan baked buns. *Food Research International*, 195, 114984.
<https://doi.org/10.1016/j.foodres.2024.114984>
- Tang, Z., Fan, J., Yang, J., Liu, L., He, L., Zhang, W., Zeng, X., & Qin, L. (2022). Rheological, texture and *in vitro* digestibility properties on steamed rice bread modified by ultrafine grinding and high pressure homogenization on rice-okara slurry. *International Journal of Food Science & Technology*, 57(8), 5216–5227. <https://doi.org/10.1111/ijfs.15837>
- Tang, Z., Fan, J., Zhang, Z., Zhang, W., Yang, J., Liu, L., Yang, Z., & Zeng, X. (2021). Insights into the structural characteristics and *in vitro* starch digestibility on steamed rice bread as affected by the addition of okara. *Food Hydrocolloids*, 113, 106533.
<https://doi.org/10.1016/j.foodhyd.2020.106533>
- Tao, X., Cai, Y., Liu, T., Long, Z., Huang, L., Deng, X., Zhao, Q., & Zhao, M. (2019). Effects of pretreatments on the structure and functional properties of okara protein. *Food Hydrocolloids*, 90, 394–402. <https://doi.org/10.1016/j.foodhyd.2018.12.028>
- Tauferová, A., Pečová, M., Czerníková, A., Dordević, D., & Tremlová, B. (2024). Effect of fiber and insect powder addition on selected organoleptic and nutritional characteristics of gluten-free bread. *Processes*, 12(5), 970–970. <https://doi.org/10.3390/pr12050970>
- Taylor, J., Ahmed, I. A. M., Al-Juhaimi, F. Y., & Bekhit, A. E. A. (2020). Consumers' perceptions and sensory properties of beef patty analogues. *Foods*, 9(1), 63.
<https://doi.org/10.3390/foods9010063>
- Temkov, M., Rocha, J. M., Rannou, C., Ducasse, M., & Prost, C. (2024). Influence of baking time and formulation of part-baked wheat sourdough bread on the physical characteristics, sensory

- quality, glycaemic index and appetite sensations. *Frontiers in Nutrition*, 11. <https://doi.org/10.3389/fnut.2024.1370086>
- Thango, B. A. (2022). Application of the analysis of variance (ANOVA) in the interpretation of power transformer faults. *Energies*, 15(19), 7224. <https://doi.org/10.3390/en15197224>
- Tóth, M., Kaszab, T., & Meretei, A. (2022). Texture profile analysis and sensory evaluation of commercially available gluten-free bread samples. *European Food Research and Technology*, 248. <https://doi.org/10.1007/s00217-021-03944-2>
- Toth, M., Vatai, G., & Koris, A. (2020). Consumers' acceptance, satisfaction in consuming gluten-free bread: A market survey approach. *International Journal of Celiac Disease*, 8(2), 44–49. <https://doi.org/10.12691/ijcd-8-2-1>
- Tovoli, F. (2015). Clinical and diagnostic aspects of gluten related disorders. *World Journal of Clinical Cases*, 3(3), 275. <https://doi.org/10.12998/wjcc.v3.i3.275>
- Triandini, I. G. A. A. H., Wiranto, & Wangiyana, I. G. A. S. (2024). Sensory evaluation of cookies formulated with rhizopora propagules flour using 9- point hedonic scale. *Journal of Agritechnology and Food Processing*, 4(2), 60–74.
- Triditanakiat, P. C., Hernández-Estrada, Z. J., & Rayas-Duarte, P. (2023). Modeling the influence of okara flour supplementation from time-temperature drying treatment on the quality of gluten-free roll produced from rice flour. *Foods*, 12(18), 3421–3421. <https://doi.org/10.3390/foods12183421>
- Tsatsaragkou, K., Protonotariou, S., & Mandala, I. (2016). Structural role of fibre addition to increase knowledge of non-gluten bread. *Journal of Cereal Science*, 67, 58–67. <https://doi.org/10.1016/j.jcs.2015.10.003>
- Turkut, G. M., Cakmak, H., Kumcuoglu, S., & Tavman, S. (2016). Effect of quinoa flour on gluten-free bread batter rheology and bread quality. *Journal of Cereal Science*, 69, 174–181. <https://doi.org/10.1016/j.jcs.2016.03.005>

- Ullah, I., Hu, Y., You, J., Yin, T., Xiong, S., Din, Z., Huang, Q., & Liu, R. (2019). Influence of okara dietary fiber with varying particle sizes on gelling properties, water state and microstructure of tofu gel. *Food Hydrocolloids*, 89, 512–522. <https://doi.org/10.1016/j.foodhyd.2018.11.006>
- Ureta, M. M., Diascorn, Y., Cambert, M., Flick, D., Salvadori, V. O., & Lucas, T. (2018). Water transport during bread baking: Impact of the baking temperature and the baking time. *Food Science and Technology International*, 25(3), 187–197. <https://doi.org/10.1177/1082013218814144>
- van den Berg, L. A., Mes, J. J., Mensink, M., & Wanders, A. J. (2022). Protein quality of soy and the effect of processing: A quantitative review. *Frontiers in Nutrition*, 9. <https://doi.org/10.3389/fnut.2022.1004754>
- Vandever, C. (2020). Introduction to research statistical analysis: An overview of the basics. *HCA Healthcare Journal of Medicine*, 1(2). <https://doi.org/10.36518/2689-0216.1062>
- Vatansever, S., Chen, B., & Hall, C. (2024). Plant protein flavor chemistry fundamentals and techniques to mitigate undesirable flavors. *Sustainable Food Proteins*, 2(1). <https://doi.org/10.1002/sfp2.1025>
- Vecchio, R., Cavallo, C., Cicia, G., & Del Giudice, T. (2019). Are (all) consumers averse to bitter taste? *Nutrients*, 11(2), 323. <https://doi.org/10.3390/nu11020323>
- Venturi, F., Sanmartin, C., & Taglieri, I. (2017). Effect of the baking process on artisanal sourdough bread-making : a technological and sensory evaluation. *Agrochimica*, 60(3), 186–198. <https://doi.org/10.12871/00021857201635>
- Verdú, S., Orlando, F., Catalán, J. M., Sánchez, A. G., Barat, J. M., & Grau, R. (2015). Physicochemical effects of chia (*Salvia hispanica*) seed flour on each wheat bread-making process phase and product storage. *Journal of Cereal Science*, 65, 67–73. <https://doi.org/10.1016/j.jcs.2015.05.011>
- Verheyen, C., Albrecht, A., Elgeti, D., Jekle, M., & Becker, T. (2015). Impact of gas formation kinetics on dough development and bread quality. *Food Research International*, 76, 860–866. <https://doi.org/10.1016/j.foodres.2015.08.013>

- Vidal, L., Antúnez, L., Ares, G., Cuffia, F., Lee, P.-Y., Le Blond, M., & Jaeger, S. R. (2019). Sensory product characterisations based on check-all-that-apply questions: Further insights on how the static (CATA) and dynamic (TCATA) approaches perform. *Food Research International*, 125, 108510. <https://doi.org/10.1016/j.foodres.2019.108510>
- Vidal, L., Ares, G., Hedderley, D. I., Meyners, M., & Jaeger, S. R. (2018). Comparison of rate-all-that-apply (RATA) and check-all-that-apply (CATA) questions across seven consumer studies. *Food Quality and Preference*, 67, 49–58. <https://doi.org/10.1016/j.foodqual.2016.12.013>
- Vidal, L., Ares, G., & Jaeger, S. R. (2021). Differences in citation proportions in CATA questions can be interpreted as differences perceived intensity of sensory attributes. *Journal of Sensory Studies*, 36(5). <https://doi.org/10.1111/joss.12695>
- Violalita, F., Yanti, H. F., Evawati, E., Roza, I., Ermianti, E., Fahmy, K., Yuswilara, Y., & Saputra, A. (2024). The effect of the ratio of mocaf and soybean flour with addition of glucomannan on physical, chemical and sensory properties of gluten-free wet noodles. *Agroteknika*, 7(4), 589–603. <https://doi.org/10.55043/agroteknika.v7i4.446>
- Visalli, M., Galmarini, M. V., & Schlich, P. (2023). Use of temporal sensory evaluation methods with consumers: A position paper. *Current Opinion in Food Science*, 54, 101102–101102. <https://doi.org/10.1016/j.cofs.2023.101102>
- Vong, W. C., & Liu, S.-Q. (2016). Biovalorisation of okara (soybean residue) for food and nutrition. *Trends in Food Science & Technology*, 52, 139–147. <https://doi.org/10.1016/j.tifs.2016.04.011>
- Wang, B., Zhang, Q., Zhang, N., Bak, K. H., Soladoye, O. P., Aluko, R. E., Fu, Y., & Zhang, Y. (2021). Insights into formation, detection and removal of the beany flavor in soybean protein. *Trends in Food Science & Technology*, 112, 336–347. <https://doi.org/10.1016/j.tifs.2021.04.018>
- Wang, C., Li, L., Sun, X., Qin, W., Wu, D., Hu, B., Raheem, D., Yang, W., Dong, H., Thava Vasanthan, & Zhang, Q. (2019). High-speed shearing of soybean flour suspension disintegrates the

- component cell layers and modifies the hydration properties of okara fibers. *LWT*, 116, 108505–108505. <https://doi.org/10.1016/j.lwt.2019.108505>
- Wang, F., Sukmanov, V., Zeng, J., & Jiang, J. (2020). Improving the quality of soybean by-products by physical methods during its use in bakery technology. Review. *Ukrainian Food Journal*, 9(3), 513–544. <https://doi.org/10.24263/2304-974x-2020-9-3-4>
- Wang, K., Lu, F., Li, Z., Zhao, L., & Han, C. (2017). Recent developments in gluten-free bread baking approaches: a review. *Food Science and Technology*, 37(suppl 1), 1–9. <https://doi.org/10.1590/1678-457x.01417>
- Wang, S., Ng, K. H., Yee, K. H., Tang, Y., Meng, R., & He, W. (2023). Comparison of pivot profile, CATA, and pivot-cata for the sensory profiling of instant black coffee. *Food Quality and Preference*, 108, 104858. <https://doi.org/10.1016/j.foodqual.2023.104858>
- Wang, X., & Komatsu, S. (2017). Improvement of soybean products through the response mechanism analysis using proteomic technique. *Advances in Food and Nutrition Research*, 82, 117–148. <https://doi.org/10.1016/bs.afnr.2016.12.006>
- Wang, X.-X., Li, S.-M., Wang, J., Bao, K.-X., & Zhou, Z.-K. (2024). Comparative effects of four types of resistant starch on the techno-functional properties of low-fat meat emulsions. *Food Chemistry*, 464, 141881–141881. <https://doi.org/10.1016/j.foodchem.2024.141881>
- Wang, X.-Y., Guo, X.-N., & Zhu, K.-X. (2016). Polymerization of wheat gluten and the changes of glutenin macropolymer (GMP) during the production of Chinese steamed bread. *Food Chemistry*, 201, 275–283. <https://doi.org/10.1016/j.foodchem.2016.01.072>
- Wang, Y., Tu, X., Shi, L., & Yang, H. (2022). Quality characteristics of silver carp surimi gels as affected by okara. *International Journal of Food Properties*, 26(1), 49–64. <https://doi.org/10.1080/10942912.2022.2153863>

- Wangiyana, I. G. A. S., Kurnia, N., Triandini, I. G. A. A. H., & Fatihatun, F. (2024). Sensory evaluation of palm sugar candy from Arenga sap water and agarwood leaves infusion using a 9-point hedonic scale. *Jurnal Agrotek Ummat*, 11(2).
- Waziroh, E., Bender, D., Saric, A., Jaeger, H., & Schoenlechner, R. (2021). Ohmic baking of gluten-free bread: Role of starch and flour on batter properties. *Applied Sciences*, 11(14), 6567. <https://doi.org/10.3390/app11146567>
- Wee, M. S. M., Goh, A. T., Stieger, M., & Forde, C. G. (2018). Correlation of instrumental texture properties from textural profile analysis (TPA) with eating behaviours and macronutrient composition for a wide range of solid foods. *Food & Function*, 9(10), 5301–5312. <https://doi.org/10.1039/c8fo00791h>
- Weissgerber, T. L., Garcia-Valencia, O., Garovic, V. D., Milic, N. M., & Winham, S. J. (2018). Why we need to report more than “Data were Analyzed by t-tests or ANOVA.” *ELife*, 7(7). <https://doi.org/10.7554/eLife.36163>
- Wilks, S. S. (2015). *Elementary statistical analysis*. Princeton University Press.
- Woomer, J. S., & Adedeji, A. A. (2020). Current applications of gluten-free grains – a review. *Critical Reviews in Food Science and Nutrition*, 61(1), 14–24. <https://doi.org/10.1080/10408398.2020.1713724>
- Woomer, J., Singh, M., Vijayakumar, P. P., & Adedeji, A. (2019). Physical properties and organoleptic evaluation of gluten-free bread from proso millet. *British Food Journal*, 122(2), 547–560. <https://doi.org/10.1108/bfj-07-2019-0555>
- Wu, T., Wang, L., Li, Y., Qian, H., Liu, L., Tong, L., Zhou, X., Wang, L., & Zhou, S. (2019). Effect of milling methods on the properties of rice flour and gluten-free rice bread. *LWT*, 108, 137–144. <https://doi.org/10.1016/j.lwt.2019.03.050>
- Wyrwicz, J., Moczowska-Wyrwicz, M., & Kurek, M. A. (2024). Modeling of texture and starch retrogradation of high-in-fiber bread using response surface methodology. *Applied Sciences*, 14(24), 11603. <https://doi.org/10.3390/app142411603>

- Xiao, T., Sun, M., Cao, S., Hao, J., Rao, H., Zhao, D., & Liu, X. (2024). Enhancing water retention and mechanisms of citrus and soya bean dietary fibres in pre-fermented frozen dough. *Food Chemistry*, *X*, 22, 101269–101269. <https://doi.org/10.1016/j.fochx.2024.101269>
- Xie, L., Zhou, W., Zhao, L., Peng, J., Zhou, X. Y., Qian, X., & Lu, L. (2023). Impact of okara on quality and in vitro starch digestibility of noodles: The view based on physicochemical and structural properties. *International Journal of Biological Macromolecules*, *237*, 124105–124105. <https://doi.org/10.1016/j.ijbiomac.2023.124105>
- Xue, S., Cui, Z., Yang, L., Wang, S., He, Y., Zhang, Y., & Liu, H. (2024). The effect of okara on physical–chemical characteristics and starch hydrolysis of extruded reconstituted rice in vitro. *Journal of Functional Foods*, *117*, 106252–106252. <https://doi.org/10.1016/j.jff.2024.106252>
- Yang, S., Zheng, B., Huang, L., Zhang, Y., & Zeng, H. (2024). Saltiness perception mechanism and salt reduction strategies in food. *Trends in Food Science & Technology*, *148*, 104521. <https://doi.org/10.1016/j.tifs.2024.104521>
- Yang, Y., Tang, X., Li, H., Lin, X., Wu, W., He, S., & Liu, Y.-G. (2025). Co-fermentation of okara with *Kluyveromyces marxianus* and *Lactobacillus plantarum* and its application in chinese steamed bread. *LWT*, *224*, 117794. <https://doi.org/10.1016/j.lwt.2025.117794>
- Yang, Z., Li, D., Chen, L., Zhang, W., Jiang, L., Huang, Z., & Tian, T. (2024). Structural characteristics, techno-functionalities, innovation applications and future prospects of soybean β -conglycinin/glycinin: a comprehensive review. *Critical Reviews in Food Science and Nutrition*, 1–18. <https://doi.org/10.1080/10408398.2024.2440601>
- Yeniwati, Y., Rahmizal, M., Dwita, S., & Yumna, A. (2024). Singkong menjadi tepung MOCAF untuk meningkatkan nilai jual di Kelompok Tani Di Nagari Toboh Gadang Kecamatan Sintuk. *Menara Pengabdian*, *4*(2), 126–134. <https://doi.org/10.31869/jmp.v4i2.6122>

- You, Z., Bai, Y., Bo, D., Feng, Y., Shen, J., Wang, Y., Li, J., & Bai, Y. (2024). A review of taste-active compounds in meat: Identification, influencing factors, and taste transduction mechanism. *Journal of Food Science*, 89(12), 8128–8155. <https://doi.org/10.1111/1750-3841.17480>
- Yüceer, M., & Asik, H. (2020). Texture, rheology, storage stability, and sensory evaluation of meringue's prepared from lipase enzyme-modified liquid egg white. *Journal of Food Processing and Preservation*, 44(9). <https://doi.org/10.1111/jfpp.14667>
- Zaidiyah, Z., Nur, B. M., Lubis, Y. M., Nasution, I. S., Nadia, F., & Khaira, U. (2022). Loaf volume and porosity for sourdough bread based modified cassava flour by linier regression and sensory evaluation approach. *IOP Conference Series*, 1116(1), 012068–012068. <https://doi.org/10.1088/1755-1315/1116/1/012068>
- Zhang, L., Doursat, C., Vanin, F. M., Flick, D., & Lucas, T. (2017). Water loss and crust formation during bread baking, Part I: Interpretation aided by mathematical models with highlights on the role of local porosity. *Drying Technology*, 35(12), 1506–1517. <https://doi.org/10.1080/07373937.2016.1260029>
- Zhang, X., Astivia, O. L. O., Kroc, E., & Zumbo, B. D. (2022). How to think clearly about the central limit theorem. *Psychological Methods*, 28(6). <https://doi.org/10.1037/met0000448>
- Zhang, Y., Liu, X., Yu, J., Fu, Y., Liu, X., Li, K., Yan, D., Barba, F. J., Ferrer, E., Wang, X., & Zhou, J. (2024). Effects of wheat oligopeptide on the baking and retrogradation properties of bread rolls: Evaluation of crumb hardness, moisture content, and starch crystallization. *Foods*, 13(3), 397–397. <https://doi.org/10.3390/foods13030397>
- Zhu, J., & Li, J. (2023). Superabsorbent hydrogels derived from okara as soil supplements for enhancing vegetable growth and production. *ACS Symposium Series*, 1, 187–204. <https://doi.org/10.1021/bk-2023-1450.ch011>