

MIANO PASTOR, ALBERTO CLAUDIO

Ingeniero Agroindustrial con Maestría y Doctorado en Ciencias y Tecnología de Alimentos. Investigador calificado como Distinguido por RENACYT, con amplia experiencia en la planificación y ejecución de proyectos de investigación científica en el área de ingeniería de procesos de alimentos. Sus especialidades incluyen transferencia de materia, tecnología de ultrasonido, viscoelasticidad de alimentos sólidos, secado, deshidratación osmótica, hidratación y procesamiento de granos y leguminosas. Además, posee la capacidad de trabajar en otras áreas de investigación dentro de la Ingeniería Agroindustrial.

Actualmente, es revisor de artículos científicos en revistas indexadas en SCOPUS y WOS. Ha publicado más de 50 artículos en revistas internacionales, ha contribuido con 5 capítulos de libros y ha escrito un libro completo. También tiene experiencia en la docencia universitaria, impartiendo cursos como Ingeniería de Alimentos, Fenómenos de Transporte, Estadística Experimental, Metodología de la Investigación y Tecnología de Alimentos.

Publicaciones:

Publicaciones científicas en Scopus/WOS

1. GUTIÉRREZ-RODRÍGUEZ, C.; TELLO-LEÓN, G.; **MIANO, A.C.** Using ethanol as pretreatment for improving drying of germinated quinoa grains. *Journal of Cereal Science*. <https://doi.org/10.1016/j.jcs.2024.104042>
2. SAAVEDRA J.; **MIANO A.C.** 2024. Microwave assisted popping of five Andean cultivars of ñuña beans: Process optimization and effect of grain's moisture content. *Scientia Agropecuaria*. <https://doi.org/10.17268/sci.agropecu.2024.027>.
3. CHUQUIZUTA T.; CHAVEZ S.G.; **MIANO A.C.**; CASTRO-GIRALDEZ M.; FITO P.J.; ARTEAGA H.; CASTRO W. 2024. Determination of hydration kinetic of pinto beans: A hyperspectral images application. *Measurement: Food*. <https://doi.org/10.1016/j.meaf00.2024.100161>.
4. **MIANO A.C.**; ROJAS M.L. 2024. Drying strategies of spent coffee grounds using refractance window method. *Food Research International*. <https://doi.org/10.1016/j.foodres.2024.114007>.
5. **MIANO A.C.**; ROJAS M.L. 2023. Engineering strategies for food fortification. *Current Opinion in Food Science*. <https://doi.org/10.1016/j.cofs.2023.101033>.

6. SAAVEDRA J.; DE OLIVEIRA Gomes B.; AUGUSTO P.E.D.; ROJAS M.L.; **MIANO A.C.** 2023. Journal of Food Process Engineering. <https://doi.org/10.1111/jfpe.14187>.
7. AMBROSIO C.M.S.; **MIANO A.C.**; SALDAÑA E.; DA GLORIA E.M. 2022. A citrus essential oil causes higher disturbance on the growth kinetics of *Enterococcus faecalis* than *Lactobacillus rhamnosus*. *Scientia Agropecuaria*. <https://doi.org/10.17268/sci.agropecu.2022.034>.
8. RAMIREZ K.; SILVA L.; GAVIDIA F.; ROJAS M.L.; **MIANO A.C.** 2022. Cut orientation effect on mass transfer: Drying and rehydration of yellow sweet potato cylinders. *Drying Technology*. <https://doi.org/10.1080/07373937.2022.2053987>
9. ROJAS M.L.; KUBO M.T.; **MIANO A.C.**; AUGUSTO P.E. 2022. Ultrasound processing to enhance the functionality of plant-based beverages and proteins. *Current Opinion in Food Science*. <https://doi.org/10.1016/j.cofs.2022.100939>
10. RURUSH E.; ALVARADO M.; PALACIOS P.; FLORES Y.; ROJAS M.L.; **MIANO A.C.** 2022. Drying kinetics of blueberry pulp and mass transfer parameters: Effect of hot air and refractance window drying at different temperatures. *Journal of Food Engineering*. <https://doi.org/10.1016/j.jfoodeng.2021.110929>
11. VÁSQUEZ U.; SICHE R.; **MIANO A.C.** 2021. Ultrasound-assisted hydration with sodium bicarbonate solution enhances hydration-cooking of pigeon pea. *LWT*. <https://doi.org/10.1016/j.lwt.2021.111191>.
12. SILVA L.; RAMIREZ K.; GAVIDIA F.; **MIANO A.C.** 2021. Freeze–thawing damage evaluation of vegetables with two cutting orientations. *Journal of Food Process Engineering*. <https://doi.org/10.1016/j.jfpe.13845>
13. **MIANO A.C.**; ROJAS M.L.; AUGUSTO P.E.D. 2021. Combining ultrasound, vacuum and/or ethanol as pretreatments to the convective drying of celery slices. *Ultrasonics Sonochemistry*. <https://doi.org/10.1016/j.ultsonch.2021.105779>.
14. IKEDA N.Y.; AMBROSIO C.M.S.; **MIANO A.C.**; ROSALEN P.L.; GLORIA E.M.; ALENCAR S.M. 2021. Essential oils extracted from organic propolis residues: An exploratory analysis of their antibacterial and antioxidant properties and volatile profile. *Molecules*. <https://doi.org/10.3390/molecules26154694>.
15. CASTANHA N.; **MIANO A.C.**; JONES O.G.; REUHS B.L.; CAMPANELLA O.H.; AUGUSTO P.E.D. 2020. Starch modification by ozone: Correlating molecular structure and gel properties in different starch sources. *Food Hydrocolloids*. <https://doi.org/10.1016/j.foodhyd.2020.106027>.
16. ZEVALLOS L.; CALDAS C.; FLORES A.; OBREGÓN J.; **MIANO A.C.**; BARRAZA-JÁUREGUI G. 2020. Mixing Design for Optimizing Ultrasound-Assisted Extraction of Phenolic Components and Anthocyanins from Blue Berries

and Grape Marc. International Journal of Fruit Science.
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17. SABADOTI V.D.; **MIANO A.C.**; AUGUSTO P.E.D. 2020. Automation of a Mattson Bean Cooker: A simple and a low-cost approach. Journal of Food Processing and Preservation. <https://doi.org/10.1111/jfpp.14769>
18. **MIANO A.C.**; CARVALHO G.R.D.; SABADOTI V.D.; ANJOS C.B.P.D.; GODOY R.; AUGUSTO P.E.D. 2020. Evaluating new lines of pigeon pea (*Cajanus cajan* L.) as a human food source. Journal of Food Processing and Preservation. <https://doi.org/10.1111/jfpp.14517>
19. LIMA, D.C.; **MIANO, A.C.**; AUGUSTO, P.E.D.; ARTHUR, V. 2019. Gamma irradiation of common beans: Effect on nutritional and technological properties. LWT – FOOD SCIENCE AND TECHNOLOGY. <https://doi.org/10.1016/j.lwt.2019.108539>
20. SINCHE-AMBROSIO, C.M; IKEDA, N.; **MIANO, A.C.**; SALDAÑA, E.; MORENO, A.; STASHENKO, E.; CONTRERAS-CASTILLO, C.; DA GLORIA, E. 2019. Unraveling the selective antibacterial activity and chemical composition of citrus essential oils. SCIENTIFIC REPORTS. <https://doi.org/10.1038/s41598-019-54084-3>
21. AGUILAR, J.; **MIANO, A.C.**; OBREGON, J.; SORIANO-COLCHADO, J.; BARRAZA-JÁUREGUI, G. 2019. Malting process as an alternative to obtain high nutritional quality quinoa flour. JOURNAL OF CEREAL SCIENCE. <https://doi.org/10.1016/j.jcs.2019.102858>
22. **MIANO, A.C.**; SABADOTI, V.D.; AUGUSTO, P. E. D. 2019. Combining Ionizing Irradiation and Ultrasound Technologies: Effect on Beans Hydration and Germination. JOURNAL OF FOOD SCIENCE. <https://doi.org/10.1111/1750-3841.14819>
23. **MIANO, A.C.**; ROJAS, M. L.; AUGUSTO, P. E. D. 2019. Using ultrasound for improving hydration and debittering of Andean lupin grains. JOURNAL OF FOOD PROCESS ENGINEERING. <https://doi.org/10.1111/jfpe.13170>
24. CASTANHA, N.; **MIANO, A.C.**; SABADOTI, V.D.; AUGUSTO, P.E.D. 2019. Irradiation of mung beans (*Vigna radiata*): A prospective study correlating the properties of starch and grains. INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES. <https://doi.org/10.1016/j.ijbiomac.2019.01.221>
25. **MIANO, A.C.**; ROJAS, M. L.; AUGUSTO, P. E. D.. 2019. Structural changes caused by ultrasound pretreatment: Direct and indirect demonstration in potato cylinders. ULTRASONICS SONOCHEMISTRY. <https://doi.org/10.1016/j.ultsonch.2018.11.015>

26. ALEXANDRE, A.; **MIANO**, A.C; BRANDÃO, T. ; MILLER, F. ; FUNDO, J. ; CALORI-DOMINGUES, M.A.; SILVA, C. ; AUGUSTO, P.E.D. 2018. Ozonation of Adzuki beans (*Vigna angularis*): Effect on the hydration kinetics, phenolic compounds and antioxidant capacity. JOURNAL OF FOOD PROCESS ENGINEERING, v. 1, p. e12893, <https://doi.org/10.1111/jfpe.12893>
27. **MIANO**, A.C.; AUGUSTO, P.E.D. 2018. The ultrasound assisted hydration as an opportunity to incorporate nutrients into grains. FOOD RESEARCH INTERNATIONAL. v. 106, p. 928-935. <https://doi.org/10.1016/j.foodres.2018.02.006>
28. **MIANO**, A.C.; SABADOTI, V.D.; AUGUSTO, P.E.D 2018. Enhancing the hydration process of common beans by ultrasound and high temperatures: Impact on cooking and thermodynamic properties. JOURNAL OF FOOD ENGINEERING, v. 225, p. 53-61. <https://doi.org/10.1016/j.jfoodeng.2018.01.015>
29. **MIANO**, A.C.; AUGUSTO, P.E.D. 2018. The Hydration of Grains: A Critical Review from Description of Phenomena to Process Improvements. COMPREHENSIVE REVIEWS IN FOOD SCIENCE AND FOOD SAFETY. <https://doi.org/10.1111/1541-4337.12328>
30. **MIANO**, A.C.; SALDAÑA, E. ; CAMPESTRINI, L.H. ; CHIORATO, A.F. ; AUGUSTO, P.E.D. 2018. Correlating the properties of different carioca bean cultivars (*Phaseolus vulgaris*) with their hydration kinetics. FOOD RESEARCH INTERNATIONAL, v. 107, p. 182-194. <https://doi.org/10.1016/j.foodres.2018.02.030>
31. AUGUSTO, P. E. D.; **MIANO**, A.C.; ROJAS, M. L.. 2017. Evaluating the Guo-Campanella Viscoelastic Model. JOURNAL OF TEXTURE STUDIES, v. 49, p. 121-128. <https://doi.org/10.1111/jtxs.12297>
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33. **MIANO**, A. C.; PEREIRA, J. C.; MIATELO, B.; AUGUSTO, P. E. D.. 2017. Ultrasound assisted acidification of model foods: Kinetics and impact on structure and viscoelastic properties In FOOD RESEARCH INTERNATIONAL. , v.100, 468-476. <https://doi.org/10.1016/j.foodres.2017.07.045>
34. BARRAZA-JÁUREGUI, GABRIELA; VEGA, G.; VALERIANO, J.; OBREGÓN, J.; SICHE, RAÚL; **MIANO**, A.C. 2017. Osmotic pretreatment to assure retention of phenolics and anthocyanins in berry jams In FOOD BIOSCIENCE. , v.17, 24-28. <https://doi.org/10.1016/j.fbio.2016.12.001>
35. AUGUSTO, P.E.D.; **MIANO**, A.C. 2016. Describing the Sigmoidal Behavior of Roasted White Lupin (*Lupinus albus*) During Hydration. In JOURNAL OF

FOOD PROCESS ENGINEERING. , v.40, e12428.
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36. **MIANO, A. C.**; PEREIRA, J. C.; SILVA, N. C.; MATTA JUNIOR, M. D.; AUGUSTO, P. E. D.. 2016. Enhancing mung bean hydration using the ultrasound technology: description of mechanisms and impact on its germination and main components. In SCIENTIFIC REPORTS. v.6, 38996
<https://doi.org/10.1038/srep38996>
37. **MIANO, A. C.**; IBARZ, A.; AUGUSTO, P. E. D. 2016. Mechanisms for improving mass transfer in food with ultrasound technology: Describing the phenomena in two model cases. In Ultrasonics Sonochemistry., v.29, 413-419.
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39. **MIANO, A. C.**; IBARZ, A.; AUGUSTO, P. E. D. 2016. Ultrasound technology enhances the hydration of corn kernels without affecting their starch properties In Journal of Food Engineering., v.197, 34-43.
<https://doi.org/10.1016/j.jfoodeng.2016.10.024>
40. **MIANO, A. C.**; GARCÍA, J. A.; AUGUSTO, P. E. D. 2015. Correlation between morphology, hydration kinetics and mathematical models on Andean lupin (*Lupinus mutabilis* Sweet) grains In lwt-food science and technology. , v.61, 290-298. <https://doi.org/10.1016/j.lwt.2014.12.032>
41. **MIANO, A. C.**; FORTI, V.A.; ABUD, H.F.; GOMEZ-JUNIOR, F.G.; CICERO, S.M.; AUGUSTO, P. E. D.. 2015. Effect of ultrasound technology on barley seed germination and vigour In SEED SCIENCE AND TECHNOLOGY. , v.43, 1-6.
<https://doi.org/10.15258/sst.2015.43.2.10>
42. **MIANO, A. C.**; AUGUSTO, P. E. D.. 2015. From the sigmoidal to the downward concave shape behavior during the hydration of grains: Effect of the initial moisture content on Adzuki beans (*Vigna angularis*) In FOOD AND BIOPRODUCTS PROCESSING. , 43-51.
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Publicaciones de libros

1. AUGUSTO P.E.D.; ROJAS M.L.; **MIANO A.C.** 2023. Food Rheology: A Practical Guide. <https://doi.org/10.1201/9781003148722>

Publicaciones de capítulos de libro

1. ROJAS, M. L., **MIANO, A. C.**, AGUILAR, K., AUGUSTO, P. E. D. 2020. Chapter 8 - Emerging Technologies for Noncarbonated Beverages Processing. Trends in Non-alcoholic Beverages. Pp. 233-261.
2. KUBO, M. T. K., ROJAS, M. L., **MIANO, A. C.** and AUGUSTO, P. E. D. 2019. Chapter 1 Rheological Properties of Tomato Products. In Tomato Chemistry, Industrial Processing and Product Development, pp. 1-25, The Royal Society of Chemistry.
3. ROJAS, M. L., **MIANO, A. C.**, KUBO, M. T. K. and AUGUSTO, P. E. D. 2019. Chapter 11 The Use of Non-conventional Technologies for Processing Tomato Products: High-power Ultrasound, High-pressure Homogenization, High Hydrostatic Pressure, and Pulsed Electric Fields. In Tomato Chemistry, Industrial Processing and Product Development, pp. 201-230, The Royal Society of Chemistry.
4. **MIANO, A. C.**; ROJAS, M. L.; AUGUSTO, P. E. D.. 2017. Other mass transfer unit operations enhancement by ultrasound In Ultrasound: Advances in Food Processing and Preservation. e ed 1. Vol. 1, 369-390
5. ROJAS, M. L.; **MIANO, A.C.**; AUGUSTO, P. E. D.. 2017. Ultrasound processing of fruits and vegetables juices In Ultrasound: Advances in Food Processing and Preservation. e ed 1, 181-200