

# Jerry Ampofo-Asiama

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## RESEARCH

Interests Food Science and Technology

Areas Plant Science · Food Science · Nutrition and Dietetics · Forestry · Biomaterials · Biochemistry

## RESEARCH SUMMARY

|              |            |           |           |                       |               |
|--------------|------------|-----------|-----------|-----------------------|---------------|
| <b>50</b>    | <b>728</b> | <b>11</b> | <b>14</b> | <b>0.76</b>           | <b>7%</b>     |
| Publications | Citations  | h-index   | i10-index | Field-weighted impact | World top 10% |

Counted from the 50 publications listed below, 2010–2026. Field-weighted impact is the mean over the 27 works scored for it; 1.00 is the world average for works of the same field, type and year. 2 of the 27 papers scored for it are among the world's most cited tenth for their field, type and year.

## POSITIONS

University of Cape Coast  
Biochemistry, Cape Coast, Ghana

## PUBLICATIONS

### Journal articles 44

1. Nazir Kizzie-Hayford, Jerry Ampofo-Asiama, Carolin Schmidt, Favour Ewenam Odukoya, Vivianne Geraldo, Rosemond Godbless Dadzie, Anja Maria Wagemans, Harald Rohm, Doris Jaros (2026). Influence of Stabilizing Additives and Maltodextrin on the Physicochemical and Functional Properties of Spray-Dried Tiger Nut Milk. *Journal of Food Science*. <https://doi.org/10.1111/1750-3841.71219>
2. Emmanuel Ogyiri Adu, Nazir Kizzie-Hayford, Rosemond Godbless Dadzie, Salifu Seidu-Larry, Godfred Inkoom, Aaron Tetey Asare, Jerry Ampofo-Asiama (2026). Influence of harvest time and cultivar type on the  $\beta$ -carotene content and quality of biofortified cassava in Ghana. *International Anatolian Agriculture, Food, Environment and Biology Congress*. <http://www.targid.net/index.php/TURSTEP/article/view/881>
3. Michael Akuamoah BOATENG, Esther NSEASOM, Philip GHANNEY, Jerry AMPOFO-ASIAMA, Wilfred SEFAH, Francis Osei AMOAKO-ANDOH (2026). Interaction of gibberellic acid and  $\beta$ -Amylase in regulating dormancy and sprouting of yam (*Dioscorea* spp.) tubers. *JOURNAL OF ADVANCES IN AGRICULTURE*. <https://doi.org/10.24297/jaa.v17i.9848>
4. Gifty Serwaa Otoo, Nazir Kizzie-Hayford, Rosemond Godbless Dadzie, Salifu Seidu-Larry, Claudia Asantewaa Gyimah, Vivianne Geraldo, Sandra Ama Kaburi, Francis Padi Lamptey, Isaaca Adade, Jerry Ampofo-Asiama (2026). Physicochemical, Functional, Sensory Properties and Willingness to Consume Porridge Made From Composite Flours of Maize, Soybean, and Ripe Plantain. *Food Science & Nutrition*. <https://doi.org/10.1002/fsn3.71585>
5. J. Ampofo-Asiama, C. A. Gyimah, S. Seidu-Larry, R. G. Dadzie, G. S. Otoo, N. Kizzie-Hayford (2026). Retail of agri-foods in some local markets in the Cape Coast municipality of Ghana: To weigh or not to weigh? *Agricultural and Food Science Journal of Ghana*. <https://doi.org/10.4314/afsjg.v17i2.4>
6. Jerry Ampofo-Asiama, Claudia Asantewaa Gyimah, Vivianne Geraldo, Rosemond Godbless Dadzie, Salifu Seidu-Larry, Emmanuella Brown, Emmanuel Azedaan Ayobe, Ernest Silvanus Dornor Asamani, Nazir Kizzie-Hayford (2025). Assessment of consumer willingness to consume artificially sweetened Roselle

beverage. *Food and Humanity*. <https://doi.org/10.1016/j.foohum.2025.100740>

7. Nazir Kizzie-Hayford, Jerry Ampofo-Asiama, Rosemond Godbless Dadzie, Salifu Seidu-Larry, Vivianne Geraldo, Claudia Asantewaa Gyimah, Baffour Kyei-Asante, Godfred Inkoom, Bernice Hayford, Christiana Odumah Hood, Jesse Adu Kwasi Baidoo, Aaron Tettey Asare (2025). Effects of Sprouting and Fermentation on the Physicochemical Properties and Nutritional Composition of Cowpea Flour, and Consumer Acceptability of Composite Doughnuts Made Thereof. *Legume Science*. <https://doi.org/10.1002/leg3.70045>
8. Rosemond Godbless Dadzie, Jerry Ampofo-Asiama, Nazir Kizzie-Hayford, Gifty Serwaa Otoo, Isaaca Adade, Salifu Seidu-Larry, Sandra Voryehor, Jesse Baidoo, Emmanuel Azedaan Ayobe, Moro Shaibu Alima (2025). Optimization and Determination of the Physicochemical Properties and Consumer Acceptability of Gluten-Free Noodles Made From Cassava–Bambara Groundnut Composite Flour. *Journal of Food Quality*. <https://doi.org/10.1155/jfq/5582669>
9. Ansumana Sandy Bockarie, Leonard Derkyi-Kwarteng, Jeffrey Amankona Obeng, Richard Kujo Adatsi, Ebenezer Aniakwaa-Bonsu, Charles Apprey, Jerry Ampofo-Asiama, Samuel Acquah (2025). Prevalence and determinants of insulin resistance in recovered COVID-19 and uninfected residents of two regional capitals in Ghana: An observational study. *PLOS Global Public Health*. <https://doi.org/10.1371/journal.pgph.0004506>
10. Samuel Bridge Nkansah, Nazir Kizzie-Hayford, Vivianne Geraldo, Selorm Omega, Salifu Seidu-Larry, Isaac Okyere, Jerry Ampofo-Asiama (2025). The Effects of Oven Type on the Quality of Smoked Fish: Comparison Between the Use of the Chorkor and Ahotor Ovens in Ghana. *Journal of Aquatic Food Product Technology*. <https://doi.org/10.1080/10498850.2025.2465633>
11. Gifty Serwaa Otoo, Ernest Ekow Abano, Robert Sarpong Amoah, Felix Edufia Agblemany, Rosemond Godbless Dadzie, Nazir Kizzie-Hayford, Salifu Seidu-Larry, Jerry Ampofo-Asiama (2024). Enhancing Protein and Vitamin A Intake Through the Addition of Bambara Groundnut and Ripe Plantain to Maize Porridge. *Legume Science*. <https://doi.org/10.1002/leg3.234>
12. Vivianne Geraldo, Jerry Ampofo-Asiama, Cynthia A. Adinortey, Isaac Okyere, Samuel Kofi Tulashie, Alexander Tetteh Kwasi Nuer, Samuel Bridge Nkansah, Selorm Omega, Salifu Seidu-Larry, Nazir Kizzie-Hayford (2024). Implementation of good manufacturing practices (GMP) to improve the quality of smoked fish (*Scomber colias*). *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.e27401>
13. Nazir Kizzie-Hayford, Salifu Seidu-Larry, Shilla Owusu-Ansah, Bright Quaye, Jerry Ampofo-Asiama (2024). Influence of Sweeteners on the Phytochemical and Physicochemical Quality and Consumer Acceptability of Roselle Beverage. *Journal of Food Processing and Preservation*. <https://doi.org/10.1155/2024/6669374>
14. ATK Nuer, S Omega, N Kizze-Hayford, Jerry Ampofo-Asiama, S Seidu-Larry (2024). Socio-Economic Activities and the Sustainability of Fish Smoking in Small Communities: Insights from the Central Region of Ghana. *International Journal of Rural Development Studies*. [https://www.kadint.net/journals\\_n/1739533610.pdf](https://www.kadint.net/journals_n/1739533610.pdf)
15. Rosemond G. Dadzie, Jerry Ampofo-Asiama, Bright Quaye, Nazir Kizzie-Hayford, Francis Amoako-Andoh, Ernest E. Abano, Robert S. Amoah (2023). Effect of Beeswax Coating on the Quality of Eggplant Fruit During Cold Storage and Optimization of Coating Conditions. *Journal of Food Quality*. <https://doi.org/10.1155/2023/5879085>
16. Nazir Kizzie-Hayford, Ernest Ekow Abano, Joshua Akanson, Esi Dankwa, Harald Rohm, Jerry Ampofo-Asiama (2023). Effects of sprouting duration on the nutrient, functional, and phytochemical properties of tiger nut flour, and the sensory properties of bread made thereof. *Journal of Food Science*. <https://doi.org/10.1111/1750-3841.16733>
17. Nazir Kizzie-Hayford, Joshua Akanson, Jerry Ampofo-Asiama, Ernest Ekow Abano (2023). Influence of Partially Substituting Wheat Flour with Tiger Nut Flour on the Physical Properties, Sensory Quality, and Consumer Acceptance of Tea, Sugar, and Butter Bread. *International Journal of Food Science*. <https://doi.org/10.1155/2023/7892739>
18. Akanson Joshua, Jerry Ampofo-Asiama (2023). Influence of Sprouting Duration on the Nutrient, Functional, and Phytochemical properties of Tiger nut flour and Bread. *International Congresses of Turkish Science and Technology Publishing*. <http://turjaf.com/index.php/TURSTEP/article/view/149>

19. B. Quaye, A. A. Zebede, F. Amoako-Andoh, R. G. Dadzie, J. Ampofo-Asiama (2022). Effect of Hot Water, Steam and Microwave Blanching on Colocasia esculenta Leaves. *Agricultural and Food Science Journal of Ghana*. <https://doi.org/10.4314/afsjg.v14i1.6>
20. Jacinta Abudu, Jerry Ampofo-Asiama, Nazir Kizzie-Hayford, Edward Ken Essuman, Salifu Seidu-Larry, Rosemond Godbless Dadzie (2022). Relevance of Food Labels among Selected Students at the University of Cape Coast, Ghana. *European Journal of Nutrition & Food Safety*. <https://doi.org/10.9734/ejnfs/2022/v14i930537>
21. Jerry Ampofo-Asiama (2021). Effect of hot-water blanching on Colocasia esculenta and Corchorus olitorius leaves. *Journal of Food Stability*. <https://www.ajol.info/index.php/jfs/article/view/229165>
22. Nazir Kizzie-Hayford, Jerry Ampofo-Asiama, Susann Zahn, Doris Jaros, Harald Rohm (2021). Enriching Tiger Nut Milk with Sodium Caseinate and Xanthan Gum Improves the Physical Stability and Consumer Acceptability. *Journal of Food Technology Research*. <https://doi.org/10.18488/journal.58.2021.82.40.49>
23. Jerry Ampofo-Asiama (2021). INFLUENCE OF COVID-19 PANDEMIC ON FOOD CHOICES AND CONSUMPTION IN GHANA. *Journal of the Ghana Science Association*.
24. Rosemond Godbless Dadzie, Robert Sarpong Amoah, Jerry Ampofo-Asiama, Bright Quaye, Nazir Kizzie-Hayford, Ernest Ekow Abano (2021). Improving the Storage Quality of Eggplants (Solanum Aethiopicum L.) Fruit using Aloe Vera Gel Coating. *Journal of Food Technology Research*. <https://doi.org/10.18488/journal.58.2021.82.58.66>
25. Jerry Ampofo-Asiama, Angela Abba Zebede, Bernard Abakah, Bright Quaye (2020). Effect of Different Processing Methods on the Quality of Ackee Fruit Arils. *European Journal of Nutrition & Food Safety*. <https://doi.org/10.9734/ejnfs/2020/v12i230195>
26. Jerry Ampofo-Asiama (2020). Phytochemical and Physicochemical Properties of Some Underutilized Tropical Fruits. *African Journal of Agriculture and Food Science*. [https://www.researchgate.net/profile/Bernard-Abakah/publication/340570445\\_PHYTOCHEMICAL\\_AND\\_PHYSICOCHEMICAL\\_PROPERTIES\\_OF\\_SOME\\_UNDERUTILIZED\\_TROPICAL\\_FRUITS/links/5e9120164585150839d23025/PHYTOCHEMICAL-AND-PHYSICOCHEMICAL-PROPERTIES-OF-SOME-UNDERUTILIZED-TROPICAL-FRUITS.pdf](https://www.researchgate.net/profile/Bernard-Abakah/publication/340570445_PHYTOCHEMICAL_AND_PHYSICOCHEMICAL_PROPERTIES_OF_SOME_UNDERUTILIZED_TROPICAL_FRUITS/links/5e9120164585150839d23025/PHYTOCHEMICAL-AND-PHYSICOCHEMICAL-PROPERTIES-OF-SOME-UNDERUTILIZED-TROPICAL-FRUITS.pdf)
27. Jerry Ampofo-Asiama, Francis Amoako-Andoh, Bright Quaye (2020). Priming with Methylene Blue Enhances the Antioxidant Properties and Germination Power of Cowpea, Millet and Sorghum Seeds. *International Journal of Plant & Soil Science*. <https://doi.org/10.9734/ijpss/2020/v32i630294>
28. Nazir Kizzie-Hayford, Kwabena Dabie, Baffour Kyei-Asante, Jerry Ampofo-Asiama, Susann Zahn, Doris Jaros, Harald Rohm (2020). Storage temperature of tiger nuts (Cyperus esculentus L) affects enzyme activity, proximate composition and properties of lactic acid fermented tiger nut milk derived thereof. *LWT*. <https://doi.org/10.1016/j.lwt.2020.110417>
29. Jerry Ampofo-Asiama, Ernest S. Atsrim, Patrick Asiamah (2019). Effect of Storage Temperature on the Microbial Quality of Fura. *Asian Food Science Journal*. <https://doi.org/10.9734/afsj/2019/v13i230101>
30. Rosemond G. Dadzie, Robert S. Amoah, Jerry Ampofo Asiama, Bright Quaye, Ernest Ekow Abano (2019). Physicochemical properties of eggplant (Solanum aethiopicum L.) fruits as affected by cassava starch coating during low temperature storage: optimisation of coating conditions. *International Journal of Postharvest Technology and Innovation*. <https://doi.org/10.1504/ijpti.2019.106461>
31. Jerry Ampofo-Asiama, Bright Quaye (2018). The Effect of Pasteurisation on the Microbiological and Nutritional Quality of Soursop (Annona muricata L.) Juice. *Asian Food Science Journal*. <https://doi.org/10.9734/afsj/2019/45610>
32. Jerry Ampofo-Asiama (2017). Metabolic profiling reveals a coordinated response of isolated lamb's (Valerianella locusta, L.) lettuce cells to sugar starvation and low oxygen stress. *Postharvest Biology and Technology*. <https://www.sciencedirect.com/science/article/pii/S092552141630343X>
33. Jerry Ampofo-Asiama (2017). The effect of temperature on the metabolic response of lamb's lettuce (Valerianella locusta,(L), Laterr.) cells to sugar starvation. *Postharvest Biology and Technology*. <https://www.sciencedirect.com/science/article/pii/S092552141630521X>
34. Jerry Ampofo-Asiama (2017). Tissue breakdown of mango (Mangifera indica L. cv. Carabao) due to

chilling injury. *Postharvest Biology and Technology*. <https://www.sciencedirect.com/science/article/pii/S0925521416303374>

35. Jerry Ampofo-Asiama (2016). Dynamics of metabolic adaptation during initiation of controlled atmosphere storage of 'Jonagold' apple: Effects of storage gas concentrations and conditioning. *Postharvest Biology and Technology*. <https://www.sciencedirect.com/science/article/pii/S0925521416300187>
36. Jerry Ampofo-Asiama (2015). Multi-objective experimental design for <sup>13</sup>C-based metabolic flux analysis. *Mathematical biosciences*. <https://www.sciencedirect.com/science/article/pii/S0025556415001480>
37. Jerry Ampofo-Asiama (2014). Characterization of the 3-D microstructure of mango (*Mangifera indica* L. cv. Carabao) during ripening using X-ray computed microtomography. *Innovative Food Science & Emerging Technologies*. <https://www.sciencedirect.com/science/article/pii/S1466856413002063>
38. Jerry Ampofo-Asiama (2014). The metabolic response of cultured tomato cells to low oxygen stress. *Plant Biology*. <https://doi.org/10.1111/plb.12094>
39. Emmanuel Amoakwah, Jerry Ampofo-Asiama, Stijn Van Slycken, David K. Essumang (2013). A Comparison of the Solubilizing Potential of Some Aminopolycarboxylic Acids, Hortrilon® and Fetrilon® for Use in Phytoextraction. *Open Journal of Soil Science*. <https://doi.org/10.4236/ojss.2013.34021>
40. J Ampofo-Asiama (2013). Metabolic adaptation during initiation of CA storage of 'Jonagold' apples. XI International Controlled and Modified Atmosphere Research Conference 1071. [https://www.actahort.org/books/1071/1071\\_57.htm](https://www.actahort.org/books/1071/1071_57.htm)
41. Jerry Ampofo-Asiama (2013). The Effect of NaCl Reduction and Replacement on the Growth of *Listeria Monocytogenes* in Broth, Cooked Ham and White Sauce. *Journal of Food Safety*. <https://doi.org/10.1111/jfs.12023>
42. Jerry Ampofo-Asiama (2011). Metabolic characterization of tomato fruit during preharvest development, ripening, and postharvest shelf-life. *Postharvest Biology and Technology*. <https://www.sciencedirect.com/science/article/pii/S0925521411001025>
43. Jerry Ampofo-Asiama (2011). Metabolic profiling of the response of tomato cells to oxygen stress. IV International Conference Postharvest Unlimited 2011 945. [https://www.actahort.org/books/945/945\\_53.htm](https://www.actahort.org/books/945/945_53.htm)
44. Jerry Ampofo-Asiama (2010). Influence of NaCl reduction and replacement on the growth of *Lactobacillus sakei* in broth, cooked ham and white sauce. *International journal of food microbiology*. <https://www.sciencedirect.com/science/article/pii/S0168160510003879>

#### Conference papers 6

1. Nazir Kizzie-Hayford, Joshua Akanson, Ernest Ekow Abano, Jerry Ampofo-Asiama (2022). Effects of Partially Replacing Wheat Flour with Tiger Nut Flour on the Physical and Sensory Properties of Different Types of Bread. *The 3rd International Electronic Conference on Foods: Food, Microbiome, and Health—A Celebration of the 10th Anniversary of Foods' Impact on Our Wellbeing*. <https://doi.org/10.3390/foods2022-12955>
2. Jerry Ampofo-Asiama (2015). Metabolic response of isolated lamb's lettuce (*Valerianella locusta*, L.) cells to sugar starvation: Kinetic modelling approach. MODEL-IT symposium, Date: 2015/10/11-2015/10/14, Location: Wageningen, the Netherlands. <https://scholar.google.com/scholar?cluster=5062684045427910533&hl=en&oi=scholar>
3. Jerry Ampofo-Asiama (2013). Metabolic Adaptation of *Lycopersicum esculentum* Cell Culture to Low Oxygen. *National Symposium on Applied Biological Sciences*, Date: 2013/02/08-2013/02/08, Location: Ghent. <https://scholar.google.com/scholar?cluster=8621796589317312490&hl=en&oi=scholar>
4. Jerry Ampofo-Asiama (2013). Optimal experimental design for <sup>13</sup>C-based metabolic flux analysis: a multi-objective approach. *International Conference on Systems Biology*, Date: 2013/08/29-2013/09/04, Location: Copenhagen, Denmark. <https://scholar.google.com/scholar?cluster=932028866554148032&hl=en&oi=scholar>
5. Jerry Ampofo-Asiama (2013). Unraveling the adaptive response of *Lycopersicum esculentum* cell

suspension culture to low-O<sub>2</sub> stress anoxia through metabolome and fluxome analysis. *11th Conference of the International Society for Plant Anaerobiosis*, Date: 2013/10/06-2013/10/11, Location: Philippines. <https://scholar.google.com/scholar?cluster=645200754117905703&hl=en&oi=scholar>

6. **Jerry Ampofo-Asiama** (2011). Effect of limiting oxygen on the central metabolic flux of tomato cells. *Advances in Metabolic Profiling*, Date: 2011/11/08-2011/11/09, Location: Dublin-Ireland. <https://scholar.google.com/scholar?cluster=12603927631939021490&hl=en&oi=scholar>