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RESEARCH

Interests Food Engineering · Postharvest Technology · Renewable Energy Technology
Areas Plant Science · Food Science · Biomaterials · Biotechnology · Nutrition and Dietetics · Cell Biology

RESEARCH SUMMARY

27	253	11	12	0.88	8%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 27 publications listed below, 2008–2026. Field-weighted impact is the mean over the 13 works scored for it; 1.00 is the world average for works of the same field, type and year. 1 of the 13 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer/Head of Department Agricultural Engineering, University of Cape Coast, Cape Coast, Ghana	2004–present
Lecturer Agricultural Engineering, University of Education Winneba, Winneba, Ghana	2003–2004
Lecturer/Head of Department Agricultural Engineering, Wa Polytechnic, Wa, Ghana	2001–2002
Programme Specialist Appropriate Technology, Opportunities Industrialization Center International (OICI), Kumasi, Ghana	2001–2002

EDUCATION AND QUALIFICATIONS

PhD Postharvest Technology Cranfield Health, Cranfield University School of Applied Sciences, Cranfield, United Kingdom	2010–2014
MSc Appropriate Technology and Management ARTES, Universität Flensburg, Flensburg, Germany	1997–1999
BSc Agricultural Engineering Agricultural Engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana	1986–1990

PUBLICATIONS

Journal articles 26

1. Samuel Younge, Robert Sarpong Amoah (2026). Addressing vitamin A deficiency in Ghana using orange-fleshed sweet potato as a food fortifier in composite flour development: a review. *Journal of the Science of Food and Agriculture*. <https://doi.org/10.1002/jsfa.70520>
2. Awudu Amadu Gariba, Robert Sarpong Amoah, Joseph Okani Honger (2025). Characterization of *Lasiodiplodia theobromae* causing post-harvest stem-end rot disease of mango and its management using synthetic fungicides. *Archives of Phytopathology and Plant Protection*. <https://doi.org/10.1080/03235408.2025.2533445>
3. 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>
4. 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>
5. Samuel Younge, Robert Sarpong Amoah, Ernest Ekow Abano, Francis Kumi, George Anyebuno (2022). Physico-nutritional characterization of composite cassava and orange-fleshed sweet potato flours and sensory evaluation of “fufu” prepared from the flour blends. *Journal of Food Processing and Preservation*. <https://doi.org/10.1111/jfpp.17254>
6. 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>
7. Ernest Ekow Abano, Robert Sarpong Amoah, Catherine Mbabazi (2020). Microwave and steam blanching as pre-treatments before air drying of *Moringa oleifera* leaves. *Journal of Agricultural Engineering*. <https://doi.org/10.4081/jae.2020.1044>
8. Mamoutou Diarra, Robert S. Amoah (2019). Physical factors in the hermetic SuperGrainBag® and effect on the larger grain borer [*Prostephanus truncatus* (Horn) (Coleoptera: Bostrichidae)] and aflatoxin production by *Aspergillus flavus* during the storage of ‘Obatanpa’ maize (*Zea mays* L.) variety. *Journal of Stored Products Research*. <https://doi.org/10.1016/j.jspr.2019.05.016>
9. 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>
10. Ernest Ekow Abano, Robert Sarpong Amoah, Eugene Kwabena Opoku (2019). Temperature, microwave power and pomace thickness impact on the drying kinetics and quality of carrot pomace. *Journal of Agricultural Engineering*. <https://doi.org/10.4081/jae.2019.872>
11. Robert S Amoah, Leon A Terry (2018). 1-Methylcyclopropene (1-MCP) effects on natural disease resistance in stored sweet potato. *Journal of the Science of Food and Agriculture*. <https://doi.org/10.1002/jsfa.8988>
12. R. S. Amoah (2017). Design and construction of a flexible laboratory-scale mixing apparatus for continuous ethylene supplementation of fresh produce. *Biosystems Engineering*. <https://www.sciencedirect.com/science/article/pii/S1537511016307504>
13. Ernest Teye, RS Amoah, MO Adu (2017). Evaluation and developing simple techniques for assessing Gari adulteration. *Journal of Food Security*. <https://www.academia.edu/download/79328761/JFS-5-5-2.pdf>
14. Robert Sarpong Amoah, Ernest Ekow Abano, Elliot Kwaku Anyidoho (2016). The Effects of Moisture

Content and Loading Orientation on Some Physical and Mechanical Properties of “Tafo Hybrid” and “Amelonado” Cocoa Beans. *Journal of Food Process Engineering*. <https://doi.org/10.1111/jfpe.12348>

15. Robert S Amoah (2016). The timing of exogenous ethylene supplementation differentially affects stored sweetpotato roots. *Postharvest Biology and Technology*. <https://www.sciencedirect.com/science/article/pii/S0925521416301077>
16. Ernest Ekow Abano, Robert Sarpong Amoah (2015). Microwave and blanch-assisted drying of white yam (*Dioscorea rotundata*). *Food Science & Nutrition*. <https://doi.org/10.1002/fsn3.249>
17. R Amoah (2012). Biochemical and physiological changes in stored sweet potatoes as mediated by 1-methylcyclopropene (1-MCP). *Acta Horticulturae*. https://www.actahort.org/books/1012/1012_43.htm
18. ABANO ERNEST EKOW, RS Amoah, Amoah (2011). Comparison of two storage structures for the storage of sweet potato tuberous roots in the coastal savannah zone of Ghana. *University of Cape Coast*. <https://ir.ucc.edu.gh/items/287f6127-1ed1-41ba-94e3-66d126c52154>
19. ABANO ERNEST EKOW, E Teye, RS Amoah (2011). Design, construction and testing of an evaporative cooling barn for storing sweet potatoes in the tropics. *Asian Journal of Agricultural Research*. <https://doi.org/10.5555/20123220678>
20. R Amoah (2011). Determination of dry matter content of Cassava tubers (*Manihot esculenta* Crantz) in the Coastal Savannah zone of Ghana using specific gravity method. *ARPN Journal of Agricultural and Biological Science*. <https://scholar.google.com/scholar?cluster=17038992042496450613&hl=en&oi=scholar>
21. E Teye, RS Amoah (2011). Effect of pre-storage treatment on the shelf-life of TIS 2 sweet potato variety. *ARPN Journal of Agricultural and Biological Science*. <https://doi.org/10.5555/20113231831>
22. RS Amoah, E Teye (2011). The storage performance of sweet potatoes with different pre-storage treatments in an evaporative cooling barn. *Asian Journal of Agricultural Research*. <https://doi.org/10.5555/20123220680>
23. RS Amoah (2010). Estimation of the material losses and gari recovery rate during the processing of varieties and ages of cassava into gari. *Asian Journal of Agricultural Research*. <https://www.academia.edu/download/89745607/qredirect.pdf>
24. RS Amoah (2008). Comparison of water use under water table control and basin irrigation. *Journal of Natural Sciences*.
25. R.S. Amoah (2008). Soil rhizosphere environment under water table control system. *Journal of Natural Sciences*.
26. RS Amoah (2008). Suitability of locally constructed solar dryers for vegetable drying. *Journal of Ghana Science Association*.

Theses 1

1. Robert Sarpong Amoah (2014). The effects of ethylene on sweetpotato storage. *Cranfield University*. <https://scholar.google.com/scholar?cluster=13384187762470794518&hl=en&oi=scholar>