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RESEARCH

Interests	Food Chemistry · Food Toxicology · Food Systems Risks and Management
Areas	Food Science · Plant Science · Health, Toxicology and Mutagenesis · Organic Chemistry · Nutrition and Dietetics · Pollution

RESEARCH SUMMARY

44	426	11	13	1.91	12%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 44 publications listed below, 2004–2026. Field-weighted impact is the mean over the 34 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 34 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Professor(Food Toxicology and Burden) 2002–present
Food Science and Technology, KNUST, Kumasi, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Head of Department 2019–2023
Food Science and Technology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

PUBLICATIONS

Journal articles 44

1. Afia Sakyiwaa Amponsah, Emmanuel Tetteh Doku, Barikisu Mohommed, Belinda Agyei-Poku, **Isaac Williams Ofosu** (2026). Microbial Safety Assessment of Fresh-Cut Ready-To-Eat Fruits in Sunyani Municipality, Ghana: A Cross-Sectional Study of Bacterial and Fungal Contamination Pattern. *Journal of Culinary Science & Technology*. https://doi.org/10.1080/15428052.2026.2615013
2. Pearl Boamah Agyekum, Herman Erick Lutterodt, Francis Brako, **Isaac Williams Ofosu** (2026). Microstructural characterization of four nixtamalized and saccharified underutilized legume powders. *Innovative Food Science & Emerging Technologies*. https://doi.org/10.1016/j.ifset.2026.104496
3. Joel Cox Menka Banahene, **Isaac Williams Ofosu**, Herman Erick Lutterodt, William Otoo Ellis (2025). Assessing the fungal contamination and potential impact of ochratoxigenic Aspergillus species on cocoa beans from cocoa-growing regions of Ghana. *Science Progress*. https://doi.org/10.1177/00368504241311963
4. Joel Cox Menka Banahene, **Isaac Williams Ofosu**, Herman Erick Lutterodt, William Otoo Ellis (2025). Exploring essential oils from Piper guineense and Aframomum melegueta as natural biocontrol agents against cocoa fungal isolates towards the safety of cocoa beans. *Food and Humanity*. https://doi.org/10.1016/j.foohum.2025.100601
5. J.A. Nkansah, H.E. Lutterodt, A.N.O. Doodo, **I.W. Ofosu** (2025). Polycyclic aromatic hydrocarbons and

acrylamide: exposure and health risks in traditional hot-smoked fish. *Applied Food Research*. https://doi.org/10.1016/j.afres.2025.101503

6. Daniel Sitsofe Yabani, **Isaac Williams Ofosu**, Gloria Mathanda Ankar-Brewoo, Herman Erick Lutterodt (2024). 3-Monochloropropandiol and glycidyl esters in heat-processed oil-based food products: Exposure and risk. *Applied Food Research*. https://doi.org/10.1016/j.afres.2024.100393
7. Afia Sakyiwaa Amponsah, Gloria Mathanda Ankar-Brewoo, Herman Erick Lutterodt, **Isaac Williams Ofosu** (2024). Assessing the microbial diversity and proximate composition of smoked-fermented bushmeat from four different bushmeat samples. *Biotechnologia*. https://doi.org/10.5114/bta.2024.135637
8. Daniel Sitsofe Yabani, **Isaac Williams Ofosu**, Gloria Mathanda Ankar-Brewoo, Herman Erick Lutterodt (2024). Exposure to Dietary Glycidyl and 3-MCPD Fatty Acid Esters and Associated Burden of Cancer in Selected Asian and European Countries: A Review and Data Synthesis. *Environmental Health Insights*. https://doi.org/10.1177/11786302241277628
9. Abdul Hamid Nuhu, Winfred-Peck Dorleku, Beatrice Blay, Evans Derban, Clara Owusuwah McArthur, Simon Elikplim Alobuia, Araba Incoom, Derry Dontoh, **Isaac Williams Ofosu**, Daniel Oduro-Mensah (2024). Exposure to aflatoxins and ochratoxin A from the consumption of selected staples and fresh cow milk in the wet and dry seasons in Ghana. *Food Control*. https://doi.org/10.1016/j.foodcont.2024.110968
10. Pearl Boamah Agyekum, Jannika Dombrowski, Herman Erick Lutterodt, **Isaac Williams Ofosu** (2024). Impact of Pretreatments on Protein Digestibility and Chemical and Functional Properties of Selected Underutilized Legumes. *ACS Food Science & Technology*. https://doi.org/10.1021/acsfoodscitech.4c00029
11. Daniel Sitsofe Yabani, **Isaac Williams Ofosu**, Gloria Mathanda Ankar-Brewoo, Herman Erick Lutterodt (2024). Occurrence of 3-monochloropropane-1,2-diol and glycidyl esters in artisanal vegetable edible oils. *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e34680
12. Joel Cox Menka Banahene, **Isaac Williams Ofosu**, Bernard Tawiah Odai, Herman Erick Lutterodt, Paul Ayiku Agyemang, Williams Otoo Ellis (2024). Ochratoxin A in food commodities: A review of occurrence, toxicity, and management strategies. *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e39313
13. A. S. Amponsah, H. E. Lutterodt, G. M. Ankar-Brewoo, **I. W. Ofosu** (2024). Smoked and Fermented Bushmeat (Mpunam) Products: Risk Assessment of Polycyclic Aromatic Hydrocarbons (PAHs) Resulting From Processing. *International Journal of Food Science*. https://doi.org/10.1155/2024/5514988
14. Daniel Sitsofe Yabani, **Isaac Williams Ofosu**, Gloria Mathanda Ankar-Brewoo, Herman Erick Lutterodt (2024). Toxicity of Dietary Exposure to 3-Monochloropropanediol, Glycidol, and Their Fatty Acid Esters. *Journal of Food Quality*. https://doi.org/10.1155/2024/7913820
15. Naa Kwarley-Aba Quartey, **Isaac Williams Ofosu**, Gloria Mathanda Ankar-Brewoo, Herman Erick Lutterodt, William Otoo Ellis (2024). Zearalenone-Contaminated Cereals in African Communities, Probabilistic Exposures and Adverse-Health Outcomes: A Meta-Analysis. *Journal of Science and Technology (Ghana)*. https://doi.org/10.4314/just.v42i1.4
16. Pearl Boamah Agyekum, Jannika Dombrowski, Herman E. Lutterodt, **Isaac W. Ofosu** (2023). Consumption patterns and usage of selected underutilized legumes in a Ghanaian community. *Legume Science*. https://doi.org/10.1002/leg3.202
17. Naa K.-A Quartey, Juanita A. Haagsma, Lea S. Jakobsen, **Isaac W. Ofosu** (2023). Dietary acrylamide-linked burden of cancers in four sub-sahara African countries: A review and data synthesis. *Heliyon*. https://doi.org/10.1016/j.heliyon.2023.e23075
18. Joel Cox Menka Banahene, **Isaac Williams Ofosu**, Bernard Tawiah Odai (2023). Surveillance of ochratoxin A in cocoa beans from cocoa-growing regions of Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2023.e18206
19. **IW Ofosu**, GM Ankar-Brewoo, HE Lutterodt (2022). Cooked rice products (Kwenkwen, Jollof, Fried-rice, Angwamo and Kanzo) as sources of polyaromatic hydrocarbons and a potential public health concern. *J Food Nutr Res*. https://scholar.google.com/scholar?cluster=17806480419789386210&hl=en&oi=scholarr
20. Ekpor Anyimah-Ackah, **Isaac W. Ofosu**, Herman Erick Lutterodt, Godfred Darko, David Okoh Kpeglo (2021). Excess lifetime cancer risk and committed effective dose associated with dietary exposure to

radioactivity of natural origin from mining areas. *Journal of Consumer Protection and Food Safety*. https://doi.org/10.1007/s00003-021-01332-2

21. Ekpor Anyimah-Ackah, **Isaac Williams Ofosu**, Herman Erick Lutterodt, Godfred Darko (2021). Exposures and Health Risks Associated with Elements in Diets from a Gold Mining Area. *Biological Trace Element Research*. https://doi.org/10.1007/s12011-021-02777-0
22. Ekpor Anyimah-Ackah, **Isaac Williams Ofosu**, Herman Erick Lutterodt, Godfred Darko (2021). Health Benefit: Risk Assessment of Trace and Essential Elements Found in Cocoa Beans and Derived Products. *Chemistry Africa*. https://doi.org/10.1007/s42250-020-00214-8
23. Ekpor Anyimah–Ackah, **Isaac W. Ofosu**, Herman Erick Lutterodt, Godfred Darko (2020). Consumer Characteristics and Consumption Analytics of Frequently Consumed Food Categories in Mining Areas. *Academic Journal of Life Sciences*. https://doi.org/10.32861/ajls.65.39.52
24. S.L. Azuma, N.K-A. Quartey, **I.W. Ofosu** (2020). Sodium benzoate in non-alcoholic carbonated (soft) drinks: Exposure and health risks. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00611
25. **Isaac W. Ofosu**, Gloria M. Ankar-Brewoo, Herman E. Lutterodt, Edmund O. Benefo, Celestina A. Menyah (2019). Estimated daily intake and risk of prevailing acrylamide content of alkalized roasted cocoa beans. *Scientific African*. https://doi.org/10.1016/j.sciaf.2019.e00176
26. Ekpor Anyimah-Ackah, **Isaac W Ofosu**, Herman E Lutterodt, Godfred Darko (2019). Exposures and risks of arsenic, cadmium, lead, and mercury in cocoa beans and cocoa-based foods: a systematic review. *Food Quality and Safety*. https://doi.org/10.1093/fqsafe/fyy025
27. **Isaac W Ofosu** (2019). Food Quality and Safety, the Collective Responsibility of All. *Acta Scientifci Nutritional Health*. https://doi.org/10.31080/asnh.2019.03.0356
28. William Ofori Appaw, **IW Ofosu**, HE Lutterodt, GM Ankar-Brewoo (2018). Acrylamide exposure and risks in most frequently consumed foods in a total diet study. *American Journal of Food Science and Technology*. https://www.academia.edu/download/77994590/AJFST-6-4-1.pdf
29. Edmund Ofosu Benefo, **Isaac Williams Ofosu** (2018). Bromelain Activity of Waste Parts of Two Pineapple Varieties. *Sustainable Food Production*. https://doi.org/10.18052/www.scipress.com/sfp.2.21
30. **Ofosu Isaac W**, Akomea-Frempong Samuel, E Owusu-Ansah, Darko Godfred (2018). Exposure and Risk Assessment of Selected Chemical Hazards in Cabbage and Lettuce. *Journal of Toxicology and Risk Assessment*. https://doi.org/10.23937/2572-4061.1510014
31. G.K. Blankson, F.C. Mills-Robertson, **I.W. Ofosu** (2018). Survey of occurrence levels of Aflatoxins in selected locally processed cereal-based foods for human consumption from Ghana. *Food Control*. https://doi.org/10.1016/j.foodcont.2018.08.005
32. Samuel Akomea-Frempong, **Isaac W. Ofosu**, Emmanuel de-Graft Johnson Owusu-Ansah, Godfred Darko (2017). Health risks due to consumption of pesticides in ready-to-eat vegetables (salads) in Kumasi, Ghana. *International Journal of Food Contamination*. https://doi.org/10.1186/s40550-017-0058-6
33. **I.W. Ofosu**, W.O. Ellis, K. Nsiah, I.N. Oduro (2017). Neglected and Underutilized Legumes (NULs): Exposure Assessment, Habitual Cooking and Eating Habits and Consumers' Characteristics. *Journal of food security*. https://doi.org/10.12691/jfs-5-5-3
34. **IW Ofosu**, WO Ellis, K Nsiah, IN Oduro (2017). Neglected and underutilized legumes (NULs) hazards and probabilistic risks associated with some selected dietary lectins. *Journal of Food Security*. https://scholar.google.com/scholar?cluster=9858039682575696742&hl=en&oi=scholarr
35. Kwatia Samuel, Pearl Dzogbefia Victoria, **William Ofosu Isaac** (2017). Optimization of amylase production by Aspergillus niger cultivated on yam peels in solid state fermentation using response surface methodology. *African Journal of Biochemistry Research*. https://doi.org/10.5897/ajbr2017.0941
36. **Isaac W. Ofosu** (2017). Pasting of G-Irradiated Proteins from Vigna Subterranea in Native Starch Models and the Surface Functional Properties of the Proteins. *Food Science and Quality Management*. https://www.academia.edu/download/109175064/38467.pdf
37. **IW Ofosu**, JK Dadson (2015). Formulation and protein analysis of fish feed incorporated with annatto seeds. *International Journal for Agriculture Research and Innovation*. https://www.researchgate.net/profile/

Isaac-Ofosu/publication/321080612_Formulation_and_Protein_Analysis_of_Fish_Feed_Incorporated_with_Annatto_Seeds/links/5a0c345aaca2721a23fab81e/Formulation-and-Protein-Analysis-of-Fish-Feed-Incorporated-with-Annatto-Seeds.pdf

38. **IW Ofosu** (2015). Microwave Glycation of Bambara Protein-Cassava Starch Composites. *ADRRI Journal of Agriculture and Food Sciences*. https://scholar.google.com/scholar?cluster=14542026769428062389&hl=en&oi=scholarr

39. **Isaac W. Ofosu**, AY Debrah (2014). Comparative analysis of environmental arsenic and other heavy metals in 2 Buruli Ulcer endemic districts in the Ashanti Region, Ghana. *Jenrm*. https://www.researchgate.net/profile/Samuel-Fosu-Gyasi/publication/285206533_Comparative_Analysis_of_Environmental_Arsenic_and_other_Heavy_Metals_in_2_Buruli_Ulcer_Endemic_Districts_of_Agogo_in_Ashanti_Region_Ghana/links/565d536f08aefe619b2556f7/Comparative-Analysis-of-Environmental-Arsenic-and-other-Heavy-Metals-in-2-Buruli-Ulcer-Endemic-Districts-of-Agogo-in-Ashanti-Region-Ghana.pdf

40. **Isaac Williams Ofosu**, Samuel Y. Oppong, Ibok Oduro (2012). Optimization of Incorporation Conditions of Renealmia battenbergiana Extract in Refined Bleached Deodorized (RBD) Palm Olein. *Food and Nutrition Sciences*. https://doi.org/10.4236/fns.2012.38143

41. **Isaac W. Ofosu** (2010). Effect of irradiation on inoculated Salmonella parathyphi B and the colour of freeze-dried egg yolk. *African Journal of Food Science*. https://www.academia.edu/download/100314729/article1380731756_Ofuso_20et_20al.pdf

42. **I.W. OFOSU**, E. APPIAH-NKANSAH, L. OWUSU, F.B. APEA-BAH, I. ODURO, W.O. ELLIS (2010). FORMULATION OF ANNATTO FEED CONCENTRATE FOR LAYERS AND THE EVALUATION OF EGG YOLK COLOR PREFERENCE OF CONSUMERS. *Journal of Food Biochemistry*. https://doi.org/10.1111/j.1745-4514.2009.00264.x

43. **Isaac W. Ofosu** (2009). Quantitative descriptive sensory analysis of the performance of pregelatinised starch-protein admixtures as fat mimetic in wheat bread. *Pakistan Journal of Nutrition*. https://www.academia.edu/download/43873735/Quantitative_Descriptive_Sensory_Analysi20160318-417-129tupx.pdf

44. **IW Ofosu**, I Oduro, WO Ellis (2004). Preparation of acetylated and carboxylated modified starches from cassava. *Journal of the Ghana Science Association*. https://www.africabib.org/rec.php?RID=Q00042771