

Robert Agbemaflé

Associate Professor · Laboratory Technology
University of Cape Coast

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RESEARCH

Interests Senior Lecturer · Food Science and Technology
Areas Analytical Chemistry · Food Science · Animal Science and Zoology · General Agricultural and Biological Sciences · Plant Science · Forestry

RESEARCH SUMMARY

29	425	14	15	1.76	30%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 29 publications listed below, 1992–2026. Field-weighted impact is the mean over the 10 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 10 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer/Dr	2007–present
Department of Laboratory Technology, University of Cape Coast, Cape Coast, Ghana	

EDUCATION AND QUALIFICATIONS

PhD (Postharvest Technology)	2010–2015
Department of Laboratory Technology, University of Cape Coast, Cape Coast, Ghana	
PhD (Postharvest Technology)	2010–2015
Department of Agricultural Engineering, University of Cape Coast, Cape Coast, Ghana	
MSc (Food Science and Technology)	1998–2000
Biochemistry, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana	
BSc Hons (Chemistry)	1987–1991
Department of Chemistry, University of Cape Coast, Cape Coast, Ghana	

PUBLICATIONS

Journal articles 27

1. Juliana Opoku Yeboah, Roseline Love MacArthur, Francis Padi Lamptey, Jerry Opoku-Ansah, Charles Lloyd Yeboah Amuah, **Robert Agbemaflé**, Caleb Mawuli Agbale, Ernest Teye (2026). Exploring deep learning potential to authenticate vegetable oils and detect fraud using a micro-spectroscopic technique and chemometrics. *Analytical Methods*. <https://doi.org/10.1039/d6ay00555a>
2. Elliot K. Anyidoho, Ernest Teye, **Robert Agbemaflé**, Charles L. Y. Amuah, Vida Gyimah Boadu (2021). Application of portable near infrared spectroscopy for classifying and quantifying cocoa bean quality parameters. *Journal of Food Processing and Preservation*. <https://doi.org/10.1111/jfpp.15445>
3. Elliot K. Anyidoho, Ernest Teye, **Robert Agbemaflé** (2021). Differentiation of Organic Cocoa Beans and Conventional Ones by Using Handheld NIR Spectroscopy and Multivariate Classification Techniques. *International Journal of Food Science*. <https://doi.org/10.1155/2021/1844675>
4. **Robert Agbemaflé** (2020). EFFECTS OF SHADE AND SUN DRYING ON NUTRIENT COMPOSITION OF

HIBISCUS CANNABINUS. *UDS International Journal of Development*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/fb861502-38da-4347-a8ab-c1c7f17bc034/content>

5. Robert Agbemaflle (2020). Effects of turmeric rhizome powder on growth, carcass and meat quality of Japanese quails fed sorghumsoybean-based diets. *Journal of Livestock Science*. https://www.researchgate.net/profile/Oluwatosin-Kennedy/publication/338293232_Effects_of_turmeric_rhizome_powder_on_growth_carcass_and_meat_quality_of_Japanese_quails_fed_sorghum-soybean-based_diets/links/5e0c24694585159aa4a90b50/Effects-of-turmeric-rhizome-powder-on-growth-carcass-and-meat-quality-of-Japanese-quails-fed-sorghum-soybean-based-diets.pdf
6. Robert Agbemaflle (2020). Growth performance, nutrient digestibility and cost of production of weaned rabbits fed processed unripe plantain peel meal based-diets. *Pakistan Journal of Nutrition*. <https://pjnonline.org/pjn/article/view/2863>
7. Elliot K. Anyidoho, Ernest Teye, Robert Agbemaflle (2020). Nondestructive authentication of the regional and geographical origin of cocoa beans by using a handheld NIR spectrometer and multivariate algorithm. *Analytical Methods*. <https://doi.org/10.1039/d0ay00901f>
8. R Agbemaflle (2019). Assessment of heavy metals [As, Cu, Zn] from boreholes in the Western Region of Ghana. *African Journal of Environmental Science and Technology*. <https://academicjournals.org/journal/AJEST/article-full-text/8B54A3360952>
9. Ernest Teye, Elliot Anyidoho, Robert Agbemaflle, Livingstone K. Sam-Amoah, Chris Elliott (2019). Cocoa bean and cocoa bean products quality evaluation by NIR spectroscopy and chemometrics: A review. *Infrared Physics & Technology*. <https://doi.org/10.1016/j.infrared.2019.103127>
10. Robert Agbemaflle, SE Aggor-Woananu, Olivia Akutey, John Kwesi Bentum (2019). Heavy Metal Concentrations in Leachates and Crops Grown Around Waste Dumpsites in Sekondi-Takoradi in the Western Region of Ghana. *Research Journal of Environmental Toxicology*. <https://doi.org/10.3923/rjet.2020.16.25>
11. Agbemaflle (2019). Physicochemical Properties and Fatty Acid Composition of Shea Butter from Tamale, Northern Ghana. *UDS International Journal of Development*.
12. R Agbemaflle (2019). Proximate, Starch, Sugar compositions and functional properties of cassava flour. *Journal of Food Security*. <https://www.academia.edu/download/80182414/JFS-7-2-3.pdf>
13. Ernest Teye, Robert Agbemaflle, Francis Lamptey (2018). Development and Examination of Sweet Potato Flour Fortified with Indigenous Underutilized Seasonal Vegetables. *Beverages*. <https://doi.org/10.3390/beverages4010005>
14. R Agbemaflle (2018). EFFECTS OF SHADE AND SUN DRYING ON NUTRIENT COMPOSITION OF HIBISCUS CANNABINUS. *UDS International Journal of Development*. <https://udsijd.org/index.php/udsijd/article/view/298>
15. Robert Agbemaflle (2018). Nutritional Evaluation of Digitaria iburua (Black Acha) grains as feed resource in the diet of Broiler Chickens. *Nigerian Journal of Animal Science*. <https://www.ajol.info/index.php/tjas/article/view/181253>
16. John Bentum, EJ Koranteng-Addo, Agbemaflle (2017). Assessment Of Ecological And Human Health Risks Of Cu, Zn And Pb Accumulation In Agricultural Soils And Okra. *Researchjournal's Journal of Ecology*. <https://ir.ucc.edu.gh/items/e7fc0658-b739-4314-864e-0ca2e64f54ac>
17. Robert Agbemaflle (2017). Effect of Cooking Methods and Ripening Stages on the Nutritional Compositions of Plantain (Musa paradisiaca). *International Journal of Food Science and Biotechnology*. <https://www.academia.edu/download/116922747/10.11648.j.jfsb.20170204.17.pdf>
18. R Agbemaflle, J. D. Owusu-Sekyere, Ato Bart-Plange (2015). Effect of deficit irrigation and storage on the nutritional composition of tomato (Lycopersicon esculentum Mill. cv. Pectomech). *Hrvatski časopis za prehrambenu tehnologiju biotehnologiju i nutricionizam*.
19. Robert Agbemaflle, Joshua D. Owusu-Sekyere, Ato Bart-Plange, John K. Otchere (2014). Effect of Deficit Irrigation and Storage on Physicochemical Quality of Tomato (Lycopersicon esculentum Mill. Var. Pectomech). *Food science and quality management*.
20. Robert Agbemaflle, JK Otchere (2014). Effect of Different Storage Methods on Proximate Composition

and Functional Properties of Cream-Skinned Sweet Potato (*Ipomea batatas* Lam). *Sch. J. Eng. and Tech.*. <https://ir.ucc.edu.gh/items/98f01b5f-d362-4625-8293-42e106c206a1>

21. Robert Agbemaflle, GE Adukpo (2013). Assessment of functional properties and nutritional composition of some cowpea (*Vigna unguiculata* L.) genotypes in Ghana. *Asian Journal of Plant Science and Research*. https://www.academia.edu/download/78777771/jabs_0613_578.pdf
22. Robert Agbemaflle (2013). Effect of storing cream- skinned sweetpotatoes in wood ash and saw dust on physico-chemical properties and shelf-life. *JBiol Food Sci Res*. <https://scholar.google.com/scholar?cluster=12846772255860992521&hl=en&oi=scholar>
23. Robert Agbemaflle, Genevieve E Adukpo, Aaron T Asare, Edward A Obodai (2013). Effects of pre-storage treatments (using brine and vinegar) and refrigerated storage on vitamin c, β carotene, microbial load and shelf-life of red pepper (*Capsicum frutescens*). *Asian Journal of Plant Science and Research*. <https://ir.ucc.edu.gh/items/59fe2745-fae3-4003-b2d8-6745574ac998>
24. Robert Agbemaflle (2013). Evaluation of Some Breeding Lines of Cowpea for Nutritional and Functional Properties. *2nd African Regional Conference Technicl Proceedings*.
25. R Agbemaflle, Edward A Obodai, GE Adukpo (2012). Effects of boiling time on the concentrations of vitamin C and beta-carotene in five selected green vegetables consumed in Ghana. *Applied Science Research*. <https://doi.org/10.5555/20123377371>
26. Agbemaflle, Robert, E.Adukpo, Genevieve, T. Asare, Aaron, A. Obodai, Edward (2011). Effects of pre-storage treatments (using brine and vinegar) and refrigerated storage on vitamin c, α -carotene, microbial load and shelf-life of red pepper (*Capsicum frutescens*). *HAL (Le Centre pour la Communication Scientifique Directe)*.
27. R Agbemaflle, K Nsiah (1998). Tomato paste production at the rural small-scale level. *Proceedings of a Workshop to Evaluate Outputs and Identify Further Vegetable Research Priorities in the Brong Ahafo Region of Ghana*. 10-11 September. <https://scholar.google.com/scholar?cluster=3692193519152606049&hl=en&oi=scholar>

Reports 1

1. Robert Agbemaflle (1992). SIGNALS AND LINEAR SYSTEMS. *JOHN WILEY & SONS*. <https://scholar.google.com/scholar?cluster=8859264093986208043&hl=en&oi=scholar>

Theses 1

1. Robert Agbemaflle (2015). Effect of Deficit Irrigation on Growth, Yield, Quality and Storage of Tomato (*Solanum lycopersicum*; cv. Pectomech. *University of Cape Coast*. <https://ir.ucc.edu.gh/items/ddbb832d-b8d8-49df-8bee-f4b9b5b0b526>