Dr. Daniel Sakyi Agyirifo

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RESEARCH

Interests	Agricultural microbiology · Biotechnology · Microbial Diversity · Microbial genomics · Bioinformatics
Areas	Food Science · Molecular Biology · Infectious Diseases · Molecular Medicine · Plant Science · Biotechnology

RESEARCH SUMMARY

34	353	9	9	1.19	11%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 34 publications listed below, 2008–2026. Field-weighted impact is the mean over the 18 works scored for it; 1.00 is the world average for works of the same field, type and year. 2 of the 18 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer
Molecular Biology and Biotechnology, University of Cape Coast School of Biological Sciences, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

PhD
Molecular Biology and Biotechnology, University of Cape Coast School of Biological Sciences, Cape Coast, Ghana

PUBLICATIONS

Journal articles 30

1. Albert Achirofi, **Daniel Sakyi Agyirifo**, Meshack Antwi-Adjei, Elvis Awuni, Francis Kwame Abrokwah (2026). Combined antibacterial effects of turmeric and cinnamon ethanolic extracts with ampicillin against resistant-microbial strains: in vitro and molecular docking approaches. *Discover Applied Sciences*. https://doi.org/10.1007/s42452-026-08319-4
2. Jackline A. Tepson, Collins Nabawo, George H. Issifu, Andrew Oklu, Enoch Owusu-Ansah Yeboah, **Daniel S. Agyirifo** (2026). Comparative population genomics of clinical and environmental Enterobacter cloacae complex reveals shared lineages, extensive gene flow and niche-specific adaptation. *Access Microbiology*. https://doi.org/10.1099/acmi.0.001156.v3
3. Michael Woode, Mark Akuamoah Appah, Emmanuel Kpalakuso Alhassan, Timothy Makwo, Du-Bois Asante, **Daniel Sakyi Agyirifo** (2026). Gene expression profiling of ovarian cancer reveals candidate diagnostic and prognostic biomarkers: An integrated bioinformatics approach. *Cancer Biomarkers*. https://doi.org/10.1177/18758592261468586
4. Emmanuel Owusu Ansah, Emmanuel Boateng Agyenim, Andrews Danquah, Stephen Kumi Addo, **Daniel Sakyi Agyirifo**, Kwadwo Fosu, Foster Kyei (2026). Genetic Insights Into Hypertension and Breast Cancer Risk in African Women: A Mendelian Randomization and Colocalization Analyses. *Annals of Human Genetics*. https://doi.org/10.1111/ahg.70038

5. Jackline A. Tepson, **Daniel S. Agyirifo** (2026). Microbial Ecology at the Nexus of Food Safety and Biotechnology With Ecological Mechanisms, Risks, and Emerging Innovations. *International Journal of Food Science*. https://doi.org/10.1155/ijfo/6618960

6. Emmanuel Owusu Ansah, Foster Kyei, Caleb Frimpong Opoku, Andrews Danquah, Kwadwo Fosu, Emmanuel Boateng Agyenim, **Daniel Sakyi Agyirifo** (2025). Associations Between Lipid Traits and Breast Cancer Risk: A Mendelian Randomization Study in African Women. *Cancer Medicine*. https://doi.org/10.1002/cam4.70928

7. P. D. Monnie, M. E. Gavor, **D. S. Agyirifo** (2025). Care Practices for Eliminating Microbial Content in Household Bath Towels. *African Journal Of Applied Research*. https://doi.org/10.26437/ajar.v11i1.828

8. **D. S. Agyirifo** (2025). Demographic Characteristics of Food Vendors, Training, Hygiene Practices, Environmental Conditions, Microbiological Quality and Safety of Fast Foods in Cape Coast, Ghana. *Journal of applied science and environmental management*. https://doi.org/10.4314/jasem.v28i12.46

9. Blessed Osei-Bimpong, **Daniel Sakyi Agyirifo**, Theophilus Abonyi Mensah, Jackline Ayeba Tepson, John P.K. Adotey (2025). Effect of Spices on the Microbial Diversity, Physicochemical Properties and Nutritional Properties of Fermented Millet (Pennisetum glaucum) Slurry. *African Journal of Empirical Research*. https://doi.org/10.51867/ajernet.6.2.2

10. Emmanuel Plas Otwe, Andrews Danquah, **Daniel Sakyi Agyirifo**, Clement Napo (2025). The Effects of Change in Climatic Conditions on Agriculture in Ghana: A Review. *American Journal of Climatic Studies*. https://doi.org/10.47672/ajcs.2813

11. **Daniel S. Agyirifo**, Jackline A. Tepson (2024). Unravelling Metagenomic Studies' Potential in Improving the Economy of Africa through Agriculture and Health. *Microbiology and Biotechnology Letters*. https://doi.org/10.48022/mbl.2407.07005

12. **Daniel Sakyi Agyirifo**, Theophilus Abonyi Mensah, Andrews Senyenam Yao Senya, Alphonse Hounkpe, Cindy Deladem Dornyoh, Emmanuel Plas Otwe (2023). Dynamics of antimicrobial resistance and virulence of staphylococcal species isolated from foods traded in the Cape Coast metropolitan and Elmina municipality of Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2023.e21584

13. **Daniel Sakyi Agyirifo**, Theophilus Abonyi Mensah, Andrews Seyenam Yao Senya, Meshach Assan, Emmanuel Plas Otwe (2022). Antimicrobial susceptibility and resistance genes profiles in gram negative isolates from automated teller machines in Cape Coast, Ghana. *African Journal of Biological Sciences*. https://doi.org/10.33472/afjbs.4.3.2022.92-102

14. Joshua Yeboah Asiamah, Josiah Wilson Tachie-Menson, **Daniel Sakyi Agyirifo**, Rosemary Agbeko, Frank Essem (2020). PESTICIDES; A NECESSARY EVIL IN THE AGRICULTURAL VALUE CHAIN- A REVIEW. *STED JOURNAL*. https://doi.org/10.7251/sted2002053y

15. **Daniel S. Agyirifo**, Mark Wamalwa, Emmanuel Plas Otwe, Isaac Galyuon, Steven Runo, Jemmy Takrama, Joseph Ngeranwa (2019). Metagenomics analysis of cocoa bean fermentation microbiome identifying species diversity and putative functional capabilities. *Heliyon*. https://doi.org/10.1016/j.heliyon.2019.e02170

16. Desmond Acheampong, Richard Opoku, Alex Boye, **Daniel Agyirifo**, Isaac Dadzie, Prince Barnie, Godwin Kwakye-Nuako, Francis Nyandzi (2018). Diagnosis and Treatment Outcome of Smear Positive Pulmonary Tuberculosis: Retrospective study in Kpando Municipal, Ghana. *Journal of Advances in Medicine and Medical Research*. https://doi.org/10.9734/jammr/2018/40156

17. TA Mensah, Aaron Tettey Asare, **DS Agyirifo** (2018). Screening of cowpea (Vigna unguiculata L. Walp) genotypes for rust (Uromyces phaseoli var. vignae) resistance in Ghana. *Plant*. https://www.academia.edu/download/124548782/10.11648.j.plant.20180604.11.pdf

18. Emmanuel Plas Otwe, **Daniel S. Agyirifo**, Isaac K. Galyuon, John S Heslop-Harrison (2017). Molecular Diversity in some Ghanaian Cowpea [Vigna unguiculata L. (Walp)] Accessions. *Tropical Plant Biology*. https://doi.org/10.1007/s12042-017-9184-9

19. Desmond O Acheampong, Christian K Adokoh, Paulina Ampomah, **Daniel S Agyirifo**, Ernest A Asiamah (2017). Send Orders for Print-Reprints and e-prints to reprints@ benthamscience. ae. *Protein & Peptide Letters*. https://ir.ucc.edu.gh/server/api/core/bitstreams/cb5b3632-5e40-4bda-8506-c9b914e696b2/

content

20. Arika WM, Nyamai DW, **Agyirifo DS** (2016). In Vivo Antidiabetic Effect of Aqueous Leaf Extract of Azardirachta indica, A. juss in Alloxan Induced Diabetic Mice. *Journal of Diabetic Complications & Medicine*. https://doi.org/10.4172/2475-3211.1000106
21. **Daniel Sakyi Agyirifo** (2015). Antidiabetic Effects of Aqueous Leaf Extracts of Acacia nilotica in Alloxan Induced Diabetic Mice. J Diabetes Metab 6: 568. doi: 10.4172/2155-6156.1000568 Page 2 of 6 Volume 6 …. *Acacia nilotica*. https://www.researchgate.net/profile/Mathew-Ngugi/publication/278405185_Antidiabetic_Effects_of_Aqueous_Leaf_Extracts_of_Acacia_nilotica_in_Alloxan_Induced_Diabetic_Mice/links/5e43d974a6fdccd9659c1156/Antidiabetic-Effects-of-Aqueous-Leaf-Extracts-of-Acacia-nilotica-in-Alloxan-Induced-Diabetic-Mice.pdf
22. **SD Agyirifo** (2015). Antidiabetic and safety of Lantana rhodesiensis in alloxan induced diabetic rats. *J Develop Drugs*. https://scholar.google.com/scholar?cluster=7620659894587205972&hl=en&oi=scholarr
23. **Daniel Sakyi Agyirifo** (2015). Genetic Diversity Studies on Selected Rice (Oryza Sativa) Genotypes Based on Amylose Content and Gelatinization Temperature. *Advances in Crop Science and Technology*.
24. **Daniel Sakyi Agyirifo** (2015). In vivo anti-diabetic effects of aqueous leaf extracts of Rhoicissus tridentata in alloxan induced diabetic mice. *J Develop Drugs*. https://scholar.google.com/scholar?cluster=7821961417298658889&hl=en&oi=scholarr
25. **DS Agyirifo** (2015). In-Vivo Antidiabetic Activity and Safety of The Aqueous Stem Bark Extract of Kleinia squarrosa. J Diabetes Metab 6: 601. doi: 10.4172/2155-6156.1000 601 Page 2 of 11 Volume 6 …. *Kleinia Squarrosa*. https://scholar.google.com/scholar?cluster=12846539425856579248&hl=en&oi=scholarr
26. **Daniel Sakyi Agyirifo** (2015). In-Vivo anti-hyperglycemic activity and safety of the aqueous stem bark extracts of Aloe secundiflora. *Medicinal & Aromatic Plants*. https://www.academia.edu/download/87102719/invivo-antihyperglycemic-activity-and-safety-of-the-aqueous-stem-barkextracts-of-aloe-secundiflora-2167-0412-S1-003.pdf
27. **DS Agyirifo** (2015). In-vivo antidiabetic activity and safety of the aqueous stem bark extract of Kleinia squarrosa. J. *Diabetes Metab*. https://www.academia.edu/download/114339850/8fdda5a5e115d710c2421007ce1e3b2dff80.pdf
28. **DS Agyirifo** (2015). Metagenomics analysis of cocoa bean fermentation microbiome identifying species diversity and putative functional capabilities. Heliyon. 2019; 5 (7): e02170. *J Agric Food Chem*. https://scholar.google.com/scholar?cluster=13625023974143775479&hl=en&oi=scholarr
29. **Daniel Sakyi Agyirifo** (2015). Phenotypic Diversity Studies on Selected Kenyan and Tanzanian Rice (Oryza sativa L) Genotypes Based on Grain and Kernel Traits. *Journal of Rice Research*.
30. GE Adukpo, NTK Dayie, JPK Adotey, **DS Agyirifo** (2010). Anti-Typhoid Properties of Phyllanthus amarus Extracts. *Journal of the Ghana Science Association*. https://www.academia.edu/download/89095547/2d6b4879c80d2c4dcec10989feb85e1ec0fc.pdf

Reports 3

1. **DS Agyirifo** (2016). Mineral elements content of selected Kenyan antidiabetic medicinal plants. *OMICS International*. https://scholar.google.com/scholar?cluster=5955985723904112 57&hl=en&oi=scholarr
2. **DS Agyirifo** (2015). Blood glucose lowering effect and safety of the aqueous leaf extracts of Zanha africana. *Pharmaceutica a Analytica Acta*. http://erepository.au.ac.ke/handle/123456789/2626
3. **DS Agyirifo** (2015). The hypoglycemic activity and safety of aqueous stem bark extracts of Acacia nilotica. *Drug Metabolism & Toxicology*. http://erepository.au.ac.ke/handle/123456789/1907

Theses 1

1. **Daniel Sakyi Agyirifo** (2008). Microbiological Quality of Fast Foods in the Cape Coast Municipality in the Central Region of Ghana. *University of Cape Coast*. https://ir.ucc.edu.gh/items/80b71657-d23b-46d0-aed9-164f018e9434