

George Amoako

Professor · Department of Physics
University of Cape Coast

ORCID [0000-0001-5878-7158](https://orcid.org/0000-0001-5878-7158) · Google Scholar scholar.google.com/citations?user=Q8PD_NsAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/cd3243d3-9df2-41d0-a2b8-908799ff9075

RESEARCH

Interests Materials Science · DNA Origami · Functionalization of DNA Origami structures · Condensed Matter Physics · Interaction of Radiation

Areas Biomedical Engineering · Molecular Biology · Mechanics of Materials · Radiation · Radiology, Nuclear Medicine and Imaging · Pulmonary and Respiratory Medicine

RESEARCH SUMMARY

26	95	6	3	2.08	13%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 26 publications listed below, 2011–2026. Field-weighted impact is the mean over the 23 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 23 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 26

1. George Kofi Amoako, George Oppong Appiagyei Ampong, Hayford Amegbe, Klenam Korbla Ledi, Livingstone Caesar (2026). Responsible entrepreneurship, social innovation, and value creation for grand challenges. *Entrepreneurship and Regional Development*. <https://doi.org/10.1080/08985626.2025.2611099>
2. Stephen Onwona Adjapong, George Kofi Amoako, Beatrice Akosua Adjapong, Atia Alpha Alfa (2026). Sustainable Consumption: The Influence of Brand Equity on Price Premium Payments and Positive Word-of-Mouth. *Journal of Global Marketing*. <https://doi.org/10.1080/08911762.2025.2606275>
3. Prince James Adeti, Joseph B. Tandoh, Gyampo Owiredo, Hyacinthe Ahiamadjie, Ruth Araba Tawiah Annan, Eli Jackson Aniabo, Georgina Esinam Fianoo, Samuel Akoto Bamford, George Amoako (2024). Modification of tube-based X-ray fluorescence spectrometer with an Am-241 excitation-based attachment for rare-earth elements analysis. *Cogent Engineering*. <https://doi.org/10.1080/23311916.2024.2356168>
4. Emmanuel Gyan, George Amoako, Stephen Inkoom, Christiana Subaar, Barry Rahman Maamah (2023). Proposed Institutional Diagnostic Reference Levels in Computed and Direct Digital Radiography Examinations in Two Teaching Hospitals. *Journal of Radiation Protection and Research*. <https://doi.org/10.14407/jrpr.2021.00367>
5. P.J. Adeti, G. Amoako, J.B. Tandoh, O. Gyampo, H. Ahiamadjie, A.S.K. Amable, C. Kansaana, Ruth A.T. Annan, A. Bamford (2023). Rare-earth element comparative analysis in chosen geological samples using nuclear-related analytical techniques. *Nuclear Instruments and Methods in Physics Research Section B Beam Interactions with Materials and Atoms*. <https://doi.org/10.1016/j.nimb.2023.04.001>
6. Calvin Kwesi Gafrey, Robert Wilson, George Amoako, Benjamin Anderson (2021). Laser-induced Fluorescence with Multivariate Analysis in Characterizing Crude Oils from Some Selected Oil Fields in Ghana. *Physical Science International Journal*. <https://doi.org/10.9734/psij/2021/v25i630262>
7. Robert Wilson, Calvin Kwesi Gafrey, George Amoako, Benjamin Anderson (2021). Metallic Composition Analysis of Crude Petroleum from Some Oil Fields in Ghana. *Physical Science International Journal*. <https://doi.org/10.9734/psij/2021/v25i530256>

8. Calvin Kwesi Gafrey, Robert Wilson, George Amoako, Benjamin Anderson (2021). Natural Radionuclide Analysis on Crude Petroleum from Some Oil Fields in Ghana. *Physical Science International Journal*. <https://doi.org/10.9734/psij/2021/v25i730271>
9. Emmanuel Gyan, Stephen Inkoom, George Amoako (2021). Optimal exposure factors for lumbar spine AP in computed radiography examinations. *Iranian Journal of radiation research/Iranian journal of radiation research*. <https://doi.org/10.29252/ijrr.19.2.421>
10. Michael Kwame Vowotor, George Amoako, Baah Sefa-Ntiri, Samuel Amoah, Samuel Sonko Sackey, Charles Lloyd Yeboah Amuah (2020). Assessment of Nine Micronutrients in Jasmine 85 Rice Grown in Ghana Using Neutron Activation Analysis. *Environment and Pollution*. <https://doi.org/10.5539/ep.v9n2p29>
11. E. Gyan, S. Inkoom, G. Amoako (2020). Entrance skin dose assessment of selected computed radiography facilities in Ghana. *Internatuinal Journal of Radiation Research*. <https://doi.org/10.52547/ijrr.18.4.817>
12. MK Vowotor, SS Sackey, G Amoako, B Sefa-Ntiri, CLY Amuah, KK Mireku (2020). Epithermal Instrumental Neutron Activation Analysis Technique in Determining Bromine, Chlorine, and Iodine in Sarotherodon Melanotheron from the Benya Lagoon, Ghana. *International Journal of Science and Engineering Investigations*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/f2fc889d-3b53-48ec-b59e-10db1248d6bd/content>
13. George Amoako (2019). Connecting DNA Origami Structures into a Designed and Functionalized Network. *Journal of Materials Science Research*. <https://doi.org/10.5539/jmsr.v8n4p14>
14. Justice Avevor, Joseph Amoako, George Amoako, Samuel Nii Tagoe (2019). Design and Fabrication of Water Phantom for Treatment Verification in High Dose Rate (HDR) Brachytherapy of the Cervix. *International Journal of Scientific Research in Science and Technology*. <https://doi.org/10.32628/ijrst196518>
15. George Amoako (2019). Femtosecond Laser Structuring of Materials: A Review. *Applied Physics Research*. <https://doi.org/10.5539/apr.v11n3p1>
16. SS Sackey, P Mensah-Amoah, G Amoako, Michael Kwame Vowotor, B Sefa-Ntiri (2019). Photo-Degradation of Microbes in Hand-Dug Well-Water Using Different Radiation Sources. *International Journal of Science and Engineering Investigations (IJEI)*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/10ce3736-bbe7-47a1-8b50-bfa55fb2a873/content>
17. Frederick Sam, George Amoako, Baah Sefa-Ntiri, Anthony Twum, P. Mensah-Amoah, John Tellam (2018). Characterization of Potential Direct Recharge in the Gold Mining District of South-Western Ghana Using the Hydrus-1D Computer Code. *Journal of Geography and Geology*. <https://doi.org/10.5539/jgg.v10n3p1>
18. Amoako, George, Mensah-Amoah, Patrick (2018). Determination of Calorific Values of Coconut Shells and Coconut Husks. *Zenodo (CERN European Organization for Nuclear Research)*. <https://doi.org/10.5281/zenodo.2647740>
19. J. Owusu-Banahene, E. O. Darko, D. F. Charles, A. Maruf, I. Hanan, G. Amoako (2018). Scatter Radiation Dose Assessment in the Radiology Department of Cape Coast Teaching Hospital-Ghana. *Open Journal of Radiology*. <https://doi.org/10.4236/ojrad.2018.84033>
20. George Amoako, Patrick Mensah-Amoah, Frederick Sam, Samuel S Sackey (2018). Some Mechanical Properties of Coconut Fiber Reinforced Polyethylene Composite to Control Environmental Waste in Ghana. *Energy and Environment Research*. <https://doi.org/10.5539/eer.v8n1p1>
21. George Amoako, Zhou Ming, Moses Jojo Eghan, Samuel Sonko Sackey (2017). DNA Origami as a Tool to Design Asymmetric Gold Nanostructures. *Journal of Materials Science Research*. <https://doi.org/10.5539/jmsr.v7n1p1>
22. G. Amoako, W. Zhang, M. Zhou, S. S. Sackey, P. Mensah-Amoah (2017). Rapid Laser Direct Writing of Plasmonic Components. *Applied Physics Research*. <https://doi.org/10.5539/apr.v9n6p19>
23. George Amoako, Zhou Ming, Ye Rian, Patrick Mensah Amoah, Anthony Twum, Frederick Sam (2015). Connecting DNA origami structures using the biotin-streptavidin specific binding. *AFRICAN JOURNAL OF BIOTECHNOLOGY*. <https://doi.org/10.5897/ajb2015.14697>
24. George Amoako, Ming Zhou, RiAn Ye, LiZhou Zhuang, XiaoHong Yang, ZhiYong Shen (2013). 3D DNA origami designed with caDNAno. *Chinese Science Bulletin*. <https://doi.org/10.1007/s11434-013-5879-y>

25. AMOAKO GEORGE, RIAN YE, LIZHOU ZHUANG, XIAOHONG YANG, ZHIYONG SHEN, MING ZHOU (2013). DNA ORIGAMI SITE-SPECIFIC ARRANGEMENT OF GOLD NANOPARTICLES. *NANO*. <https://doi.org/10.1142/s1793292013500641>
26. G Amoako, SY Mensah, A Twum (2011). Stability of Gold Thin Films on Polyimide. *International Review of Physics*. https://www.researchgate.net/profile/George-Amoako-2/publication/325996198_Stability_of_Gold_Thin_Films_on_Polyimide/links/5b3b9238a6fdcc8506ee9c1e/Stability-of-Gold-Thin-Films-on-Polyimide.pdf