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RESEARCH

Interests	Health Physics · Optics · Applied Spectroscopy · Applied Nuclear Science
Areas	Radiation · Artificial Intelligence · Atomic and Molecular Physics, and Optics · Health, Toxicology and Mutagenesis · Pollution · Water Science and Technology

RESEARCH SUMMARY

19	70	4	3	0.42	0%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 19 publications listed below, 2011–2025. 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. 0 of the 10 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 18

1. **Michael Kwame Vowotor**, CLY Amuah, J Opoku-Ansah, POW Adueming (2025). Classification of organic and conventional cocoa beans using laser-induced fluorescence spectroscopy combined with chemometric techniques. *Journal of Fluorescence*.
2. Sylvia Owusua Donkor, Samuel Sonko Sackey, **Michael Kwame Vowotor**, Charles Lloyd Yeboah Amuah, Rabbi Boateng, Ebenezer Teye Tatchie, Jerry Opoku-Ansah, Peter Osei-Wusu Adueming (2024). Analysis of Colorfastness in Metallic Prints Using Absorption Spectroscopy. *Journal of Spectroscopy*. https://doi.org/10.1155/jspe/2632412
3. **Michael K. Vowotor**, Samuel S. Sackey, Charles L. Y. Amuah, Andrew Huzortey, Irene K. Aboh, Andrews A. Druye (2023). Analysis of seven micronutrients in breast milk of lactating mothers from the Central Region of Ghana using epithermal neutron activation. *Integrated Health Research Journal*. https://doi.org/10.47963/ihrj.v1i1.1180
4. Justice Allotey Pappoe, Olivia Mongson, Charles Lloyd Yeboah Amuah, Jerry Opoku-Ansah, Peter Osei-Wusu Adueming, Rabbi Boateng, Moses Jojo Eghan, Samuel Sonko Sackey, Elliot Kwaku Anyidoho, Andrew Atiogbe Huzortey, Benjamin Anderson, **Michael Kwame Vowotor**, Ernest Teye (2023). Classification of Organic and Conventional Cocoa Beans Using Laser-Induced Fluorescence Spectroscopy Combined with Chemometric Techniques. *Journal of Fluorescence*. https://doi.org/10.1007/s10895-023-03499-3
5. E.K. Amewode, B. Sefa-Ntiri, A. Owusu, **M. K. Vowotor**, S. S. Sackey, F. Kumi, C. L. Y Amuah (2023). Investigation of Amended Sandy Soil's Water Retention Characteristics. *African Journal Of Applied Research*. https://doi.org/10.26437/ajar.v9i2.563
6. **Michael Kwame Vowotor**, Raymond Edziah, Samuel Sonko Sackey, Emmanuel Kofi Amewode, Sandra Baaba Frempong (2021). Assessment of Arsenic and Copper Pollution of the Benya Lagoon, Ghana By Neutron Activation Analysis. *Journal of Engineering Advancements*. https://doi.org/10.38032/jea.2021.04.004
7. **M. K. Vowotor**, E. K. Amewode (2020). Anthropogenic Impact of Five Heavy Metals on Benya Lagoon Water - Ghana. *International Journal of Science and Engineering Investigations*.

8. **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

9. **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

10. **Michael K. Vowotor**, Samuel S. Sackey, Charles L. Y. Amuah, Andrew Huzortey, Dennis M. Ahorlu, Godwin Kortey, Dickson Kuvedzi (2019). Neutron Activation Analysis as a tool to Determine Concentration of Selected Metals in Table Salt Mined from Benya Lagoon, Ghana. *chemistry and materials research*. https://doi.org/10.7176/cmr/11-8-06

11. 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 (IJSEI)*. https://ir.ucc.edu.gh/server/api/core/bitstreams/10ce3736-bbe7-47a1-8b50-bfa55fb2a873/content

12. **M. K. Vowotor**, SS Sackey (2019). Use of Geo-Accumulation Index and Enrichment Factor in Assessing Pollution of Some Heavy Metals in KEEA, Ghana Tidal Flat. *International Journal of Science and Engineering Investigations (IJSEI)*. https://ir.ucc.edu.gh/server/api/core/bitstreams/ef2fe9ec-3792-4bed-96c7-8e4e2da99933/content

13. Samuel Sonko Sackey, Baah Sefa-Ntiri, Patrick Mensah-Amoah, Jonathan Ntow, **Michael Kwame Vowotor**, Andrew Huzortey, Angela Akyea (2017). Microbial Purification in Well-Water Using UV-Vis LEDs and Monitoring Using Laser-Induced Fluorescence. *Applied Physics Research*. https://doi.org/10.5539/apr.v9n6p36

14. **MK Vowotor**, Samuel Sonko Sackey, Christiana Odumah Hood, E Tatchie, DC Adukpo, KK Mireku, S Nyarko (2015). Daily Intake and Sources of Trace Elements in Sarotherodon melanotheron from the Benya Lagoon, KEEA, Ghana, Using Instrumental Neutron Activation Analysis. *Journal of Basic & Applied Sciences*. https://www.researchgate.net/profile/Samuel-Sackey-2/publication/301201935_Daily_Intake_and_Sources_of_Trace_Elements_in_Sarotherodon_melanotheron_from_the_Benya_Lagoon_KEEA_Ghana_Using_Instrumental_Neutron_Activation_Analysis/links/570bfc1a08aee0660351a954/Daily-Intake-and-Sources-of-Trace-Elements-in-Sarotherodon-melanotheron-from-the-Benya-Lagoon-KEEA-Ghana-Using-Instrumental-Neutron-Activation-Analysis.pdf

15. Samuel S. Sackey, **Michael K. Vowotor**, Afred Owusu, Patrick Mensah-Amoah, Ebenezer T. Tatchie, Baah Sefa-Ntiri, Christiana O. Hood, Sampson M. Atiemo (2015). Spectroscopic Study of UV Transparency of Some Materials. *Environment and Pollution*. https://doi.org/10.5539/ep.v4n4p1

16. **Michael Kwame Vowotor**, Christiana Odumah Hood, Samuel Sonko Sackey, Alfred Owusu, Ebenezer Tatchie, Savanna Nyarko, Daniel Manu Osei, Kwadwo Kesse Mireku, Crystal Bubune Letsa, Sampson M. Atieomo (2014). An Assessment of Heavy Metal Pollution in Sediments of a Tropical Lagoon: A Case Study of the Benya Lagoon, Komenda Edina Eguafo Abrem Municipality (KEEA) — Ghana. *Journal of Health and Pollution*. https://doi.org/10.5696/2156-9614-4-6.26

17. **MK Vowotor**, CO Hood, KK Mireku (2012). Determination of Mn, Cu, and Na in Sarotherodon Melanotheron (Blackchin Tilapia) From the Fosu Lagoon, Cape Coast-Ghana, Using Instrumental Neutron Activation Analysis (INAA). *The African Review of Physics*. http://lamp.ictp.it/index.php/aphysrev/article/download/609/263

18. CO Hood, **MK Vowotor** (2011). APPLICATION OF PSEUDOCYCLIC INAA TO DETERMINE Se, Sc AND Dy IN GHANAIAN FISHES USING GHARR-1. *The African Review of Physics*. http://aphysrev.ictp.it/index.php/aphysrev/article/download/452/209

Theses 1

1. **Michael Kwame Vowotor** (2020). Epithermal Instrumental Neutron Activation Analysis Assessment of Micronutrients in fish, Breast Milk and Rice Using Gharr-1: Case Study of Southern Ghana. *University of Cape Coast*. https://ir.ucc.edu.gh/server/api/core/bitstreams/af3f266d-6144-4824-8a62-a0db327e62e1/content