Christiana Odumah Hood (Ph. D)

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RESEARCH

Interests	Environmental Physics · Mercury Pollution · Applied Nuclear/Radiation/Health Physics · Air quality
Areas	Pollution · Health, Toxicology and Mutagenesis · Nutrition and Dietetics · Safety Research · Atomic and Molecular Physics, and Optics · Dermatology

RESEARCH SUMMARY

17	58	4	2	0.45	0%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 17 publications listed below, 2011–2026. Field-weighted impact is the mean over the 9 works scored for it; 1.00 is the world average for works of the same field, type and year. 0 of the 9 papers scored for it are among the world's most cited tenth for their field, type and year.

EDUCATION AND QUALIFICATIONS

Ph.D. 2012–2017
Physics, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 13

1. John Kwaku Prosper Adotey, Caleb Mawuli Agbale, Samuel Tetteh, **Christiana Odumah Hood**, Samuel Acheampomg, Carlos Kwesi Tettey, Rosemond Godbless Dadzie, Emmanuel Ogyiri Adu, Francis Nkrumah, Mandela Toku, Agnes Tutuwaa, Aaron Tettey Asare (2026). Characterization of Starch From Four Cassava Varieties Using Fourier Transform Infrared Spectroscopy, Powder x-ray Diffraction, and Scanning Electron Microscopy. *Starch - Stärke*. https://doi.org/10.1002/star.70185
2. Nazir Kizzie-Hayford, Jerry Ampofo-Asiama, Rosemond Godbless Dadzie, Salifu Seidu-Larry, Vivianne Geraldo, Claudia Asantewaa Gyimah, Baffour Kyei-Asante, Godfred Inkoom, Bernice Hayford, **Christiana Odumah Hood**, Jesse Adu Kwasi Baidoo, Aaron Tettey Asare (2025). Effects of Sprouting and Fermentation on the Physicochemical Properties and Nutritional Composition of Cowpea Flour, and Consumer Acceptability of Composite Doughnuts Made Thereof. *Legume Science*. https://doi.org/10.1002/leg3.70045
3. Michael Aboah, Michael Miyittah, **Christiana Odumah Hood** (2025). Fuel Communications. *Fuel*. https://www.researchgate.net/profile/Wilson-Ofori-Sarkodie/publication/388388692_Biofuel_in_Ghana_Potentials_and_strategies_for_policy_implementation/links/69678399abecff2489eb16de/Biofuel-in-Ghana-Potentials-and-strategies-for-policy-implementation.pdf
4. Michael Aboah, Iqra Atif, Michael Miyittah, Christian Julien Isac Gnimadi, **Christiana Odumah Hood**, Georgina Sarquah (2024). Assessment of Ghana's current energy types to meet tomorrow's needs. *Fuel Communications*. https://doi.org/10.1016/j.jfueco.2024.100118
5. **Christiana Odumah Hood**, Michael K. Miyittah, Charles A. Odame-Ankrah, Keren Abaidoo, Delali Tulasi, Ruth Serwaah Ampontuah, Dennis Kpakpo Adotey, Irene Opoku-Ntim (2024). Indoor Radon Monitoring in Building Types of a Periurban Area in Cape Coast Metropolis, Southern Ghana. *Indoor Air*. https://doi.org/10.1155/2024/8966193

6. **Christiana Odumah Hood**, Jaćimović Radjoko, Samuel Yeboah Mensah, Milena Horvat (2023). Spatial distribution of Hg in Pra River Basin, Southwestern Ghana using HF acid combination method. *Environmental Monitoring and Assessment*. https://doi.org/10.1007/s10661-023-11122-y

7. **Christiana Odumah Hood**, Savannah Nyarko (2023). Update on the status of Women in Physics in Ghana. *AIP Conference Proceedings*. https://pubs.aip.org/aip/acp/article-abstract/3040/1/050017/2921991

8. 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

9. 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

10. 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

11. **Christiana Odumah Hood** (2013). The radon health hazards education in Ghana. *Elixir Geoscience*. https://www.researchgate.net/profile/Irene-Opoku-Ntim/publication/294522346_The_Radon_Health_Hazards_Education_in_Ghana/links/56c18be108aeedba0564f71d/The-Radon-Health-Hazards-Education-in-Ghana.pdf

12. 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

13. **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

Conference papers 2

1. Aba Bentil Andam, Paulina Ekua Amponsah, Irene Nsiah-Akoto, **Christiana Odumah Hood**, Savannah Nyarko (2019). Women in physics in Ghana: Our story. *AIP conference proceedings*. https://doi.org/10.1063/1.5110092

2. Aba Bentil Andam, Paulina Ekua Amponsah, Irene Nsiah-Akoto, Kwame Gyamfi, **Christiana Odumah Hood** (2013). The changing face of women in physics in Ghana. *AIP conference proceedings*. https://doi.org/10.1063/1.4794241

Theses 2

1. **Christiana Odumah Hood** (2017). Mercury and Other Elements in the Pra River Basin, Ghana: Doctoral Dissertation. *C. Odumah Hood*. https://scholar.google.com/scholar?cluster=12437649775308077650&hl=en&oi=scholarr

2. **CHRISTIANA ODUMAH HOOD** (2017). Sciences, College of Agriculture and Natural Sciences, University of Cape. *Department of Physics of the School of Physical Sciences, College of Agriculture and Natural Sciences, University of Cape Coast*. https://ir.ucc.edu.gh/server/api/core/bitstreams/3a6411bd-c664-429a-b330-2a0eb1294b81/content