Asiamah Isaac

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RESEARCH

Interests: medicinal/pharmaceutical chemistry · organic synthesis · drug metabolism · drug discovery · natural products

Areas: Pharmacology · Plant Science · Organic Chemistry · Computational Theory and Mathematics · Food Science · Molecular Biology

RESEARCH SUMMARY

30	314	7	7	2.65	21%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 30 publications listed below, 2006–2026. Field-weighted impact is the mean over the 14 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 14 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Associate Professor 2023–present
Chemistry, University of Cape Coast, Cape Coast, Ghana

Senior Lecturer 2018–2023
Chemistry, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 25

1. Akua Gyamfi, De-youngster Wereko Brobbey, Michael Konney Laryea, Mercy Badu, **Isaac Asiamah**, Lawrence Sheringham Borquaye (2026). Nanoemulsification of Cleistopholis patens and Vitex simplicifolia essential oils enhances antimicrobial action and ciprofloxacin synergy. *Pharmacological Research - Natural Products*. https://doi.org/10.1016/j.prenap.2026.100555
2. Eunice E. Ampem Danso, Justice Kumi, Abigail Aning, Sherif Hamidu, Janet Ampofo, Latif Adams, **Isaac Asiamah**, Francis Ackah Armah, Alexander K. Nyarko, Desmond Omane Acheampong (2025). Anti-cancer potential of hydroethanolic extracts of Kyllinga nemoralis: An in vitro and in-silico studies. *Pharmacological Research - Natural Products*. https://doi.org/10.1016/j.prenap.2025.100161
3. Samuel Asiamah Obiri, Denzel Opoku-Kwabi, Yaw Opoku-Boahen, Francis Ackah Armah, Malcolm Patrick Fynn, Lawrence Sheringham Borquaye, **Isaac Asiamah** (2025). Crude alkaloids from Phyllanthus fraternus, Webster: Antibacterial, time-kill kinetics and resistance modulation studies. *Pharmacological Research - Natural Products*. https://doi.org/10.1016/j.prenap.2025.100312
4. Alkhair Adam Khalil Mohamed, Tamekloe Woasiedem, Philip Collins Appiah-Ofori, Esraa Mohammed Abdulmahmoud Adam, Samuel Asiamah Obiri, Lawrence Sheringham Borquaye, Christian K. Adokoh, Ghazi Elamin, **Isaac Asiamah** (2025). In Silico Investigation of Phytochemicals From Clinically Tested Herbal Extracts as Potential Dihydrofolate Reductase Inhibitors for Buruli Ulcer. *BioMed Research International*. https://doi.org/10.1155/bmri/4196295
5. Alkhair Adam Khalil Mohamed, **Isaac Asiamah**, Ghazi Elamin, James Darkwa, Christian K. Adokoh (2025). In silico molecular studies of Phosphinogold(I) thiocarbohydrate complexes: insights into multi-target

anticancer mechanisms. *Frontiers in Chemistry*. https://doi.org/10.3389/fchem.2025.1533026

6. **Isaac Asiamah**, C. K. Adokoh (2025). Targeted Anti-Cancer Therapy Using Lactobionamidoalkyl Sulfure Analogue-Modified Gold Nanoparticles: Design and Characterization. *Informatica*.
7. Mustapha A. Ahmed, Elvis O. Ameyaw, Francis A. Armah, Patrick M. Fynn, **Isaac Asiamah**, George Ghartey-Kwansah, Felix K. Zoiku, Ebenezer Ofori-Attah, Christian K. Adokoh (2024). Alkaloidal Extracts from Avicennia africana P. Beauv. (Avicenniaceae) Leaf: An Antiplasmodial, Antioxidant, and Erythrocyte Viable. *Advances in Pharmacological and Pharmaceutical Sciences*. https://doi.org/10.1155/2024/4541581
8. Tamekloe Woasiedem, Ishmael Amoako-Attah, Francis Ackah Armah, **Isaac Asiamah** (2024). Anti-black pod disease activity of leaf extract of Carica papaya Linn. *Journal of Natural Pesticide Research*. https://doi.org/10.1016/j.napere.2024.100082
9. Christian K. Adokoh, Akwasi Boadu, **Isaac Asiamah**, Clement Agoni (2024). Synthesis and characterization of gold(I) thiolate derivatives and bimetallic complexes for HIV inhibition. *Frontiers in Chemistry*. https://doi.org/10.3389/fchem.2024.1424019
10. **Isaac Asiamah**, Samuel Asiamah Obiri, Woasiedem Tamekloe, Francis Ackah Armah, Lawrence Sheringham Borquaye (2023). Applications of molecular docking in natural products-based drug discovery. *Scientific African*. https://doi.org/10.1016/j.sciaf.2023.e01593
11. Jahnissi Frimpomah Odoom, Caleb Impraim Aboagye, Philipina Acheampong, **Isaac Asiamah**, Godfred Darko, Lawrence Sheringham Borquaye (2023). Chemical Composition, Antioxidant, and Antimicrobial Activities of the Leaf and Fruit Essential Oils of the West African Plum, Vitex doniana. *Journal of Chemistry*. https://doi.org/10.1155/2023/9959296
12. Jehoshaphat Oppong Mensah, Aaron Boakye, Prince Manu, Prisca Baah Nketia, Edward Ntim Gasu, **Isaac Asiamah**, Lawrence Sheringham Borquaye (2023). Computational Studies Provide a Molecular Basis for the Quorum Sensing Inhibitory Action of Compounds from Dioon spinulosum Dyer Ex Eichler. *ChemistrySelect*. https://doi.org/10.1002/slct.202203773
13. Richard Kwamla Amewu, Patrick Amoateng, Patrick Kobina Arthur, Prince Asare, **Isaac Asiamah**, Daniel Boamah, Isaac Darko Otchere, Cedric Dzidzor Amengor, Edmund Ekuadzi, Kelly Chibale, Susan Jane Farrell, Regina Appiah-Oppong, Dorcas Osei-Safo, Kevin David Read, Ian Hugh Gilbert, Dorothy Yeboah-Manu (2022). Drug discovery research in Ghana, challenges, current efforts, and the way forward. *PLoS neglected tropical diseases*. https://doi.org/10.1371/journal.pntd.0010645
14. Boadu Kwasi Opoku, **Asiamah Isaac**, Anang Akrofi Micheal, John Kwesi Bentum, Wanjala Paul Muyoma (2021). Characterization of Chemically Activated Carbons Produced from Coconut and Palm Kernel Shells Using SEM and FTIR Analyses. *American Journal of Applied Chemistry*. https://doi.org/10.11648/j.ajac.20210903.15
15. **I Asiamah** (2019). Triple Quadrupole-Linear Ion Trap Mass Spectrometry (QqQLIT-MS) Approach For Distinguishing Between Aromatic And Benzylic Glutathione Conjugates. *Journal of Ghana Science Association,*.
16. **Isaac Asiamah**, Ed S. Krol (2018). Quadrupole linear ion-trap mass spectrometry studies on glutathione conjugates of nordihydroguaiaretic acid (NDGA) analogues reveals phenol-type analogues are without reactive metabolite-mediated toxic liability. *Cogent Chemistry*. https://doi.org/10.1080/23312009.2018.1562858
17. **Isaac Asiamah** (2015). Ring substitution influences oxidative cyclisation and reactive metabolite formation of nordihydroguaiaretic acid analogues. *Bioorganic & Medicinal Chemistry*. https://www.sciencedirect.com/science/article/pii/S096808961530064X
18. **Isaac Asiamah** (2013). A Previously Unrecognized Kanosamine Biosynthesis Pathway in Bacillus subtilis. *Journal of the American Chemical Society*. https://doi.org/10.1021/ja4010255
19. **I Asiamah** (2013). Bioactivation of herbal and dietary constituents of herbal medicines and normal diet may lead to toxicological outcomes in humans. *International Journal of Pharmaceutical and Chemical Sciences*.
20. **I Asiamah** (2010). CODEN (USA): JCPRC5. *J. Chem*. https://ir.ucc.edu.gh/server/api/core/bitstreams/4c926c30-2989-4e3d-b4b5-2982f6b8cad3/content

21. **I Asiamah** (2010). Phytochemical screening and biological activity studies on methanolic extract of Psychotria ankasensis. *International Journal of Pure & Applied Chemistry*. https://scholar.google.com/scholar?cluster=15435298171944589137&hl=en&oi=scholarr

22. **I Asiamah** (2010). Quality evaluation of locally manufactured amoadiaquine tablets in Accra, Ghana. *J. Chem. Pharm Res*. https://www.researchgate.net/profile/Epton-Koranteng-Addo/publication/330222929_Quality_evaluation_of_locally_manufactured_amodiaquine_tablets_in_Accra_Ghana/links/5c34cd8c299bf12be3b79cee/Quality-evaluation-of-locally-manufactured-amodiaquine-tablets-in-Accra-Ghana.pdf

23. **I Asiamah** (2009). Essential of Practical Chemistry for Senior High Schools. *ISBN*:.

24. **I. Asiamah** (2007). Microbiology of lactic acid fermentation of eggplant fruits. *Asian Journal of Chemistry*. https://doi.org/10.5555/20093306721

25. **I Asiamah** (2006). Post-harvest stability of 5-hydroxytryptophan in Griffonia simplicifolia seeds. *International Journal of Pure and Applied Chemistry,*. https://scholar.google.com/scholar?cluster=12471648533801532571&hl=en&oi=scholarr

Conference papers 3

1. **I Asiamah** (2012). Enhancing therapeutic potentials of nordihydroguaiaretic acid (NDGA) through synthesis and metabolism studies of novel phenol and catechol NDGA analogues. *95th Canadian Chemistry Conference and Exhibition*.

2. **I Asiamah** (2012). Nordihydroguaiaretic acid (NDGA) analogues: quinone formation versus intramolecular cyclization to benzocyclooctadienes. *Western Canadian Medicinal Chemistry Workshop*.

3. **I Asiamah** (2011). Synthesis of nordihydroguaiaretic acid (NDGA) analogues and their metabolism studies. *The 18th Annual Life and Health Sciences Research Conference*.

Reports 1

1. **I Asiamah** (2010). Synthesis of compounds related to the precursors, degradation products and by-products of Chemical Warfare Agents. *SPIEZ LABORATORY, Switzerland*.

Theses 1

1. **Isaac Asiamah** (2015). Synthesis of nordihydroguaiaretic acid (NDGA) analogues and their oxidative metabolism. *University of Saskatchewan*. https://harvest.usask.ca/bitstream/10388/ETD-2015-06-1915/3/ASIAMAH-DISSERTATION.pdf