

Justice Kwaku Addo

Senior Lecturer · Department of Chemistry
University of Cape Coast

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RESEARCH

Interests Synthetic Chemistry · Medicinal Chemistry · Natural Product Chemistry · Phytochemistry
Areas Molecular Biology · Food Science · Plant Science · Endocrinology, Diabetes and Metabolism · Immunology · Nutrition and Dietetics

RESEARCH SUMMARY

17	214	8	8	1.87	14%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 17 publications listed below, 2012–2026. 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. 2 of the 14 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2018–present
Chemistry, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

DOCTOR OF PHILOSOPHY (CHEMISTRY)
University of Cape Coast, Cape Coast, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

POST-GRADUATE RESEARCH FELLOW, ICIPE
BEHAVIORAL AND CHEMICAL ECOLOGY UNIT, International Centre for Insect Physiology and Ecology, Nairobi, Kenya

GHANA SCIENCE ASSOCIATION(GSA)
Cape Coast, Ghana

MEMBER
GHANA CHEMICAL SOCIETY, Cape Coast, Ghana

MEMBER
UNIVERSITY TEACHERS ASSOCIATION OF GHANA, Cape Coast, Ghana

PUBLICATIONS

Journal articles 16

1. Nyaradzo Ellen Masango, Ernest Amponsah Asiamah, Orleans Martey, Justice Kwaku Addo, Samuel Kyei, Alex Boye (2026). Aqueous Extract of *Opuntia ficus-indica* (L. Mill) Cladodes Demonstrates Antidiabetic Effect in Normoglycemic and STZ-Induced Diabetic Rats. *BioMed Research International*. <https://doi.org/10.1155/bmri/5516794>
2. Nyaradzo Ellen Masango, Justice Kwaku Addo, Timothy Makwo, Evans Akimat, Morgan Otundo Wasilwa, Alkhair Adam Khalil Mohamed, Samuel Kyei (2026). In Silico screening and molecular dynamics

simulations predict flinderole a as a putative binder of the dengue virus NS3 helicase RNA-binding cavity. *In Silico Research in Biomedicine*. <https://doi.org/10.1016/j.insr.2026.100342>

3. Jianbin Li, Michael Ackah, Frank Kwarteng Amoako, Justice Kwaku Addo, Xin Jin, Frank Kumi, Vailly Jubline Banzouzi Bouzika, Hao Wei, John Nelson Buah, Isaac K.A. Galyuon, Meina Zhu, Mengdi Zhao, Weiguo Zhao (2026). Magnesium-induced transporters remodel the ionome of mulberry leaves by promoting the nitrate reductase (NIA) gene in nitrogen metabolism. *Plant Science*. <https://doi.org/10.1016/j.plantsci.2026.113396>
4. Hilda Amoakoa, Daniel Owusu Apraku, Prince Asamoah Boateng, Emmanuel Kofi Adjei, Justice Addo, Michael Konney Laryea, Lawrence Sheringham Borquaye (2025). Chemical characterization, biological activities, and molecular docking studies of essential oils from *Annona reticulata* L (Annonaceae). *Essential Chem*. <https://doi.org/10.1080/28378083.2025.2540327>
5. Alex Boye, Victor A. Barku, Justice K. Addo, Orleans Martey, Ernest A. Asiamah, Mainprice A. Essuman, Dennis Doe (2024). *Zanthoxylum zanthoxyloides* (Lam.) B. Zepernick & Timler alkaloidal extract exerts hepatoprotective effects in rats with a CCl₄/olive oil-induced hepatocellular carcinoma-like phenotype. *Journal of Taibah University Medical Sciences*. <https://doi.org/10.1016/j.jtumed.2024.06.009>
6. Adwoa Frema Amanfo, Samuel Kyei, Yaw Duah Boakye, Clement Osei Akoto, Justice Kwaku Addo, Kofi Oduro Yeboah, Newman Osafo (2023). Anticataract Effect of the Aqueous Extract of the Flowers of *Aspilia africana* in Murine Model of Diabetic and Age-Related Cataracts. *Advances in Pharmacological and Pharmaceutical Sciences*. <https://doi.org/10.1155/2023/7867497>
7. Justice Allotey Pappoe, Jerry Opoku-Ansah, Charles Lloyd Yeboah Amuah, Peter Osei-Wusu Adueming, Samuel Sonko Sackey, Rabbi Boateng, Justice Kwaku Addo, Moses Jojo Eghan, Patrick Mensah-Amoah, Benjamin Anderson (2023). Automatic Classification of Antimalarial Herbal Drugs Exposed to Ultraviolet Radiation from Unexposed Ones Using Laser-Induced Autofluorescence with Chemometric Techniques. *Journal of Fluorescence*. <https://doi.org/10.1007/s10895-023-03281-5>
8. Adwoa Frema Amanfo, Samuel Kyei, Yaw Duah Boakye, Clement Osei Akoto, Justice Kwaku Addo, Kofi Oduro Yeboah, Newman Osafo (2023). The Aqueous Stem Bark Extract of *Alstonia boonei* Exhibits Anticataract Activity in Sprague Dawley Rat. *Scientifica*. <https://doi.org/10.1155/2023/5524137>
9. Joseph K. Adjei, Alberta D. Dayie, Justice K. Addo, Anita Asamoah, Ernest O. Amoako, Benedicta Y. Egoh, Ebenezer Bekoe, Nathaniel O. Ofori, George A. Adjei, David K. Essumang (2022). Occurrence, ecological risk assessment and source apportionment of pharmaceuticals, steroid hormones and xenoestrogens in the Ghanaian aquatic environments. *Toxicology Reports*. <https://doi.org/10.1016/j.toxrep.2022.06.011>
10. Justice Kwaku Addo, Ernest Owusu-Ansah, Nicholas T.K.D. Dayie, Xavier Cheseto, Baldwyn Torto (2022). Synthesis of 1,2,3-triazole-thymol derivatives as potential antimicrobial agents. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2022.e10836>
11. Dominic Nkwantabisa Kuma, Alex Boye, Godwin Kwakye-Nuako, Yaw Duah Boakye, Justice Kwaku Addo, Ernest Amponsah Asiamah, Eugene Agyei Aboagye, Orleans Martey, Mainprice Akuoko Essuman, Victor Yao Atsu Barku (2022). Wound Healing Properties and Antimicrobial Effects of *Parkia clappertoniana* Keay Fruit Husk Extract in a Rat Excisional Wound Model. *BioMed Research International*. <https://doi.org/10.1155/2022/9709365>
12. Desmond Omane Acheampong, Isaac Kyei Baffour, Victor Yao Atsu Barku, Justice Kwaku Addo, Mainprice Akuoko Essuman, Alex Boye (2021). *Zanthoxylum zanthoxyloides* Alkaloidal Extract Improves CCl₄-Induced Hepatocellular Carcinoma-Like Phenotypes in Rats. *Evidence-based Complementary and Alternative Medicine*. <https://doi.org/10.1155/2021/3804379>
13. Alex Boye, Desmond Omane Acheampong, Eric Ofori Gyamerah, Ernest Amponsah Asiamah, Justice Kwaku Addo, Derrick Addae Mensah, Augustine Suurinobah Brah, Philippa Jennifer Ayiku (2020). Glucose lowering and pancreato-protective effects of *Abrus precatorius* (L.) leaf extract in normoglycemic and STZ/Nicotinamide – Induced diabetic rats. *Journal of Ethnopharmacology*. <https://doi.org/10.1016/j.jep.2020.112918>
14. Alex Boye, Justice Kwaku Addo, Desmond Omane Acheampong, Ama Kyeraa Thomford, Emmanuel Asante, Regina Elorm Amoaning, Dominic Nkwantabisa Kuma (2020). The hydroxyl moiety on carbon one (C1) in the monoterpene nucleus of thymol is indispensable for anti-bacterial effect of thymol. *Heliyon*.

<https://doi.org/10.1016/j.heliyon.2020.e03492>

15. Justice Kwaku Addo (2012). Evaluation of the Antimicrobial Activity of Zanthoxylum zanthoxyloides Root Bark Extracts. *Research Journal of Medicinal Plant*. <https://www.academia.edu/download/89654284/qredirect.pdf>
16. Justice Kwaku Addo, JN Boampong, EO Ameyaw (2012). Gastroprotective effect and safety assessment of Zanthoxylum zanthoxyloides (Lam) waterm root bark extract. *American Journal of Pharmacology and Toxicology*. <https://doi.org/10.5555/20133167435>

Theses 1

1. Justice Kwaku Addo (2017). Chemical modification of the biologically active compound, thymol. *Department of Chemistry 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/034f8e64-0cb1-47ff-ac65-ab1e470d1c3a/content>