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RESEARCH

Interests	Antimicrobial · Antimalarial and Anticancer agents from natural sources · and their formulations
Areas	Food Science · Plant Science · Nutrition and Dietetics · Pharmacology · Forestry · Genetics

RESEARCH SUMMARY

59	711	15	18	1.25	8%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 59 publications listed below, 2007–2025. Field-weighted impact is the mean over the 38 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 38 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 57

1. Prince George Acquah Jnr, Mariam El Boakye-Gyasi, Frederick William Akuffo Owusu, Desmond Asamoah Bruce Otu, Raphael Johnson, **Marcel Tunkumgnen Bayor** (2025). Extraction and Comparative Assessment of the Physicochemical Properties of Pectin From Four Fruit Wastes in Ghana. *Scientifica*. https://doi.org/10.1155/sci5/9954324
2. Desmond A.B. Otu, Frederick W.A. Owusu, Mariam E. Boakye-Gyasi, Raphael Johnson, **Marcel T. Bayor**, PGA Jnr, Yayra Edzor-Agbo, Mary-Ann Archer (2025). Pharmaceutical evaluation of plantain peel pectin as a disintegrant in conventional tablets. *South African Journal of Science*. https://doi.org/10.17159/sajs.2025/18894
3. Ekow Quansar, **Marcel Tunkumgnen Bayor**, Janet Anchirinah, Stephen Yao Gbedema, Frederick William Akuffo Owusu, Desmond Asamoah Bruce Otu, Prince George Jnr Acquah, Kawsar Adam Baninie (2025). Physicochemical Characterisation and Potential Uses of Oils From the Entrails of Nile Tilapia From Different Farming Sites in Ghana. *Journal of Food Quality*. https://doi.org/10.1155/jfq/4379862
4. Frederick William Akuffo Owusu, Prince George jnr Acquah, Mariam El Boakye-Gyasi, Raphael Johnson, **Marcel Tunkumgnen Bayor**, Desmond Asamoah Bruce Otu, Samuel Nartey, Pearl Osei Akoto (2025). Sweet Potato Peel Pectin's Potential as a Suspending Agent in Pharmaceutical Formulations: The Effect of Extraction Technique. *Journal of Pharmacy*. https://doi.org/10.31436/jop.v5i1.325
5. Desmond Asamoah Bruce Otu, Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, Raphael Johnson, Prince George Jnr Acquah, Yayra Edzor-Agbo, **Marcel Tunkumgnen Bayor**, Mary-Ann Archer (2024). Biogenic Waste from Two Varieties of Plantain in Ghana Contain Pectin with Potential Binding Properties in Conventional Tablets. *The Scientific World JOURNAL*. https://doi.org/10.1155/2024/5461358
6. Frederick William Akuffo Owusu, Prince George jnr Acquah, Mariam El Boakye-Gyasi, **Marcel Tunkumgnen Bayor**, Desmond Asamoah Bruce Otu, Sarah Amankra Meta, Ama Amankwah Adu-Boampong (2024). CHARACTERIZATION AND PHARMACEUTICAL EVALUATION OF DAUCUS CAROTA PECTIN AS A SUSPENDING AGENT IN ORAL DOSAGE FORMS. *International Journal of Pharmacy & Integrated Health Sciences*. https://doi.org/10.56536/ijpihs.v5i1.125
7. Desmond Asamoah Bruce Otu, Frederick William Akuffo Owusu, Prince George Jnr Acquah, Mariam El

Boakye-Gyasi, Yayra Edzor-Agbo, Raphael Johnson, **Marcel Tunkumgnen Bayor**, Mary-Ann Archer (2024). Effect of Ripening and Extraction Method on the Physicochemical Properties of Pectin Extracted from Peels of Apem and Apantu Plantain Cultivars in Ghana. *Journal of Chemistry*. https://doi.org/10.1155/2024/6677179

8. Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, **Marcel Tunkumgnen Bayor**, Kwabena Ofori-Kwakye, Prince George Jnr Acquah, Emmanuella Anowaa Quarcoo, Jennifer Asare, Benjamin Amponsah Anokye, Paul Kweku Tandoh (2024). Evaluation of Okra Pectin from Different Genotypes as Effective Suspending Agents in Pharmaceutical Formulations. *Journal of Pharmacy*. https://doi.org/10.31436/jop.v4i1.251
9. Samuel Lugrie Kipo, Noble Kuntworbe, Mariam El Boakye-Gyasi, Yaa Asantewaa Osei, Frederick William Akuffo Owusu, Raphael Johnson, Kwabena Ofori-Kwakye, **Marcel Tunkumgnen Bayor** (2024). Evaluation of the Physicochemical and Micromeritic Properties of Exudate Gum of Cussonia arborea Stem Bark in Conventional Tablet Formulation. *Journal of Chemistry*. https://doi.org/10.1155/2024/7840644
10. Makafui Seshie, Billal Musah Obeng, Vivian Etsiapa Boamah, **Marcel Bayor**, Evelyn Yayra Bonney, Stephen Yao Gbedema, Kwamena William Coleman Sagoe (2024). Resistance to protease inhibitors among persons living with HIV in Ghana: a case for viral load and drug resistance monitoring. *Virology Journal*. https://doi.org/10.1186/s12985-024-02354-6
11. Martin Boadi, Stephen Yao Gbedema, Yaw Duah Boakye, **Marcel Tunkumgnen Bayor**, Eugene Agyei Aboagye (2024). Wound Healing and Acute Dermal Toxicity Studies of Ludwigia octovalvis (Jacq.) P. H. Raven (Onagraceae) in Sprague–Dawley Rats. *Journal of Tropical Medicine*. https://doi.org/10.1155/2024/9576349
12. Christopher Sarpong, **Marcel Tunkumgnen Bayor**, Raphael Johnson, Maruf Abdullai Yakubu, Mariam El Boakye-Gyasi, Stephen Yao Gbedema, Frederick William Akuffo Owusu (2023). The Consumption of Energy Drink and Its Potential Effect on Sleep Patterns: A Case Study in the Kumasi Metropolis. *Journal of Pharmaceutical Care*. https://doi.org/10.18502/jpc.v11i2.13364
13. **Marcel Tunkumgnen Bayor**, Princesca Delpe, Timothy R. Chu, Kanika Arora, Brittany Lord, Akanksha Verma, Deepa Bedi, Balasubramanyam Karanam, Isra Elhussin, Yalei Chen and 37 others (2022). African Ancestry–Associated Gene Expression Profiles in Triple-Negative Breast Cancer Underlie Altered Tumor Biology and Clinical Outcome in Women of African Descent. *Cancer Discovery*. https://doi.org/10.1158/2159-8290.cd-22-0138
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15. Martin Boadi, Stephen Y. Gbedema, **Marcel T. Bayor**, Vivian E. Boamah, Hayford Odoi (2022). Antimicrobial Property of Microorganisms Isolated from Soil and Water – Body Samples in Ghana. *Journal of Advances in Microbiology*. https://doi.org/10.9734/jamb/2022/v22i530462
16. Maxwell Kwame Boakye, Alfred Ofori Agyemang, Bernard Kofi Turkson, Edward Debrah Wiafe, Michael Frimpong Baidoo, **Marcel Tunkumgnen Bayor** (2022). Ethnobotanical inventory and therapeutic applications of plants traded in the Ho Central Market, Ghana. *Ethnobotany Research and Applications*. https://doi.org/10.32859/era.23.8.1-20
17. Ivan K. Simpson, Frederick W. A. Owusu, Mariam E. Boakye-Gyasi, Philomena Entsie, **Marcel T. Bayor**, Kwabena Ofori-Kwakye (2022). Pharmaceutical Applications of Glucose Syrup from High Quality Cassava Flour in Oral Liquid Formulations. *International Journal of Food Science*. https://doi.org/10.1155/2022/6869122
18. Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, Raphael Johnson, Yaa Asantewaa Osei, Emmanuel Asante, Desmond Asamoah Bruce Otu, Julia Afrakoma Ansong, Philomena Entsie, **Marcel Tunkumgnen Bayor** (2022). Pharmaceutical Assessment of Melia azedarach Gum as a Binder and Disintegrant in Immediate-Release Tablets. *The Scientific World JOURNAL*. https://doi.org/10.1155/2022/9810099
19. Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, **Marcel Tunkumgnen Bayor**, Christina Osei-

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22. Louisa C. Sarkodie, Philomena Entsie, Mariam E. Boakye-Gyasi, Frederick W.A. Owusu, **Marcel T. Bayor**, Kwabena Ofori-Kwakye (2021). Evaluation of the binding and disintegrating properties of gum obtained from the stem bark of Cinnamomum zeylanicum. *South African Journal of Science*. https://doi.org/10.17159/sajs.2021/11550
23. Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, Philomena Entsie, Christina Osei-Asare, Ofosua Adi-Dako, Grace Boakye Bosuthe, Esther Antwi-Mensah, **Marcel Tunkumgnen Bayor** (2021). Formulation and Pharmaceutical Assessment of Annona muricata Oral Capsules and Suspension as Antidiarrhea Dosage Forms. *Journal of Chemistry*. https://doi.org/10.1155/2021/1792437
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27. Mariam El Boakye-Gyasi, Frederick William Akuffo Owusu, Philomena Entsie, Jacob Kwaku Agbenorhevi, Ben Kwaku Branoh Banful, **Marcel Tunkumgnen Bayor** (2021). Pectin from Okra (Abelmoschus esculentus L.) Has Potential as a Drug Release Modifier in Matrix Tablets. *The Scientific World JOURNAL*. https://doi.org/10.1155/2021/6672277
28. Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, Jacob Kwaku Agbenorhevi, **Marcel Tunkumgnen Bayor**, Kwabena Ofori-Kwakye (2021). Potential and Comparative Tablet Disintegrant Properties of Pectin Obtained from Five Okra Genotypes in Ghana. *Scientifica*. https://doi.org/10.1155/2021/2902335
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32. **Marcel Tunkumgnen Bayor**, B. D. Mbabila, Yaa Asantewaa Osei, Stephen Yao Gbedema, Mariam El

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39. MARIAM EL BOAKYE-GYASI, N Kuntworbe, **MT Bayor**, K Ofori-Kwakye (2015). Development and In Vitro Evaluation of Oral Gels and Vaginal Pessaries from Crude Extracts of Four Ghanaian Medicinal Plants Intended for the Treatment Of Candidiasis. *World Journal of Pharmaceutical Research*. https://doi.org/10.5555/20153328683
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Book chapters 1

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Reports 1

1. **Marcel Tunkumgnen Bayor** (2014). Global surgery and anesthesia manual: providing care in resource-limited settings. *CRC Press*. https://books.google.com/books?hl=en&lr=&id=N0QrBgAAQBAJ&oi=fnd&pg=PP1&dq=info:WVMO9Uddh_AJ:scholar.google.com&ots=3-lsVkDSW-&sig=e1qqusSSXKDP2WZNd_TANK8Hvj4