Mary-ann Archer

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RESEARCH

Interests	Pharmaceutics
Areas	Plant Science · Food Science · Pharmaceutical Science · Complementary and alternative medicine · Forestry · Nutrition and Dietetics

RESEARCH SUMMARY

36	451	11	11	2.18	22%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 36 publications listed below, 2016–2026. Field-weighted impact is the mean over the 27 works scored for it; 1.00 is the world average for works of the same field, type and year. 6 of the 27 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2022–present
Pharmaceutics, University of Cape Coast, Cape Coast, Ghana

Research Officer 2018–2022
Pharmaceutics and Quality control, Centre for Plant Medicine Research, Akuapem-Mampong, Ghana

EDUCATION AND QUALIFICATIONS

FPCPharm 2020–2022
Drug Production and Quality Assurance, West African Postgraduate college of Pharmacists, Accra, Ghana

MPCPharm 2017–2020
drug production and quality assurance, West African Postgraduate College of Pharmacist, Accra, Ghana

MPhil Pharmaceutics 2013–2015
Pharmaceutics, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

B. Pharm 2008–2012
Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Full member 2022–present
Organisation for women in Science, Ghana, Ghana

MPCPharm 2017–present
West African postgraduate college of Pharmacist, Accra, Ghana

Pharmaceutical Society of Ghana 2014–present
Ashanti, Ghana

PUBLICATIONS

Journal articles 31

1. Doris Kumadoh, Emmanuel Adase, **Mary-Ann Archer**, Henry Brews Daniels, Hilda Amekyeh, Michael O. Kyene, Genevieve N. Yeboah, Ofosua Adi-Dako, Christina Osei-Asare, Peter Ankutse, Faith Adisa Musumba (2026). A study of the consistency in selected Ghanaian herbal formulation over a 7-year period. *European Journal of Integrative Medicine*. https://doi.org/10.1016/j.eujim.2026.102624
2. **Mary-Ann Archer**, Kwabena Ofori-Kwakye, Raphael Johnson, Ernest Amponsah Asiamah, Wisdom Ahlidja, Mustapha Abubakar Ahmed, Isaac Tabiri Henneh (2026). Assessment of the Safety Profile of Purified Pentadesma butyracea (Clusiaceae) Gum Intended as a Pharmaceutical Excipient. *Journal of Toxicology*. https://doi.org/10.1155/jt/4227246
3. **Mary-Ann Archer**, Kwabena Ofori-Kwakye, Raphael Johnson, Isaac Yaw Attah, Frederick William Akuffo Owusu, Prince George Jnr Acquah, Samuel Lugrie Kipo (2026). Investigation of the drug release modifying property of Pentadesma butyracea gum in diclofenac sodium matrix tablets. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0341668
4. **Mary-Ann Archer**, Kwabena Ofori-Kwakye, Raphael Johnson, Frederick William Akuffo Owusu, Yaa Asantewaa Osei, Sophia Kusi-Addai, Kezia Nyarkoh, Noble Kuntworbe (2026). Pharmaceutical Evaluation of the Suspending Properties of Pentadesma butyracea Gum in Biphasic Liquid Preparations of Diffusible and Indiffusible Powders. *Advances in Pharmacological and Pharmaceutical Sciences*. https://doi.org/10.1155/adpp/2120600
5. **Mary-Ann Archer**, Kwabena Ofori-Kwakye, Raphael Johnson, Isaac Yaw Attah, Samuel Lugrie Kipo, Mariam El Boakye-Gyasi, Frederick William Akuffo Owusu, Emmanuel Awintiig Adakudugu, Doris Kumadoh (2025). Evaluation of the binder effect of Pentadesma butyracea gum on the mechanical characteristics of paracetamol tablets. *Scientific African*. https://doi.org/10.1016/j.sciaf.2025.e03147
6. Doris Kumadoh, Emmanuel Adase, **Mary-Ann Archer**, Peter Ankutse, Michael O. Kyene, Genevieve N. Yeboah (2025). Optimizing particle size for enhanced aqueous extraction of phytochemicals from medicinal plants. *South African Journal of Botany*. https://doi.org/10.1016/j.sajb.2025.12.013
7. 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
8. **Archer, Mary-Ann** (2025). raw data for evaluation of the suspending properties of Pentadesma butyracea gum. *Zenodo (CERN European Organization for Nuclear Research)*. https://doi.org/10.5281/zenodo.17544881
9. 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
10. Doris Kumadoh, Hilda Amekyeh, **Mary-Ann Archer**, Michael O. Kyene, Genevieve N. Yeboah, Henry Brew-Daniels, Ofosua Adi-Dako, Christina Osei-Asare, Emmanuel Adase, Alfred A. Appiah (2024). Determination of consistency in pH of some commercial herbal formulations in Ghana. *Journal of Herbal Medicine*. https://doi.org/10.1016/j.hermed.2024.100876
11. 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
12. Maxwell Mamfe Sakyiamah, Paa Kwesi Gordon, Peter Bolah, Prince Kyei Baffour, Ebenezer Ehun, Olga Quasie, Doris Kumadoh, **Mary-Ann Archer**, Susana Oteng Mintah, Alfred Ampomah Appiah (2023).

Assessment of the phytochemical composition and antimicrobial properties of Tapinanthus bangwensis leaves hosted by the branches of Persea americana. *BMC Complementary Medicine and Therapies*. https://doi.org/10.1186/s12906-023-03860-w

13. Frederick William Akuffo owusu, **Mary-Ann Archer** (2023). Batch-to-batch consistency in the quality attributes of a phyto-pharmaceutical MA001 used to treat typhoid in Ghana. *Journal of Medical and Biomedical Sciences*. https://www.ajol.info/index.php/jmbs/article/download/249509/238639
14. **Mary-Ann Archer**, K Ofori-Kwakye, R Johnson, Isaac Yaw Attah, Emmanuel Adakudugu (2023). C41-Investigation of the binding properties of purified Pentadesma butyracea gum: Anatural alternative to a synthetic polymer. *Journal Africain de Technologie Pharmaceutique et Biopharmacie (JATPB)*. https://www.soapgi-jatpb.org/index.php/jatpb/article/view/72
15. Ofosua Adi-Dako, Frederick William Akuffo Owusu, Isaac Yaw Attah, Doris Kumadoh, PG Acquah Jnr, Issaka Nelson, Nii Odartey Hutton-Mills, Karen Yaa Yeboaa Obese, Joseph Adusei Sarkodie, Benoit Banga N'guessan, Awo Afi Kwapong, Christina Osei-Asare, Emmanuel Adase, **Mary-Ann Archer** (2023). Development of Modified-Release Diclofenac Sodium Capsules Using Blends of Pectin-Clay Multiparticulate Hybrid Systems as Release Retardants. *Journal of Chemistry*. https://doi.org/10.1155/2023/8384739
16. Doris Kumadoh, Michael O. Kyene, **Mary-Ann Archer**, Genevieve N. Yeboah, Emmanuel Adase, Maxwell Mamfe Sakyiamah, Susana Oteng-Mintah, Ofosua Adi-Dako, Christina Osei-Asare, Esther Eshun Oppong (2023). Evaluation of a tea bag formulation of Tapinanthus bangwensis (Engl. and K. Krause) Danser leaves, meant for the management of diabetes. *Scientific African*. https://doi.org/10.1016/j.sciaf.2023.e02025
17. Frederick William Akuffo Owusu, Prince George Jnr Acquah, Mariam E. L. Boakye-Gyasi, Raphael Johnson, Genevieve Naana Yeboah, **Mary-Ann Archer**, Mercy Birago Antwi, Sandra Obenewaa Asare (2023). Pharmaceutical Assessment of the Impact of the Method of Extraction on the Suitability of Pectin from Plantain (Musa paradisiaca) Peels as a Suspending Agent in Oral Liquid Formulations. *The Scientific World JOURNAL*. https://doi.org/10.1155/2023/8898045
18. Doris Kumadoh, **Mary-Ann Archer**, Michael O. Kyene, Genevieve N. Yeboah, Ofosua Adi-Dako, Christina Osei-Asare, Emmanuel Adase, Susana Oteng Mintah, Hilda Amekyeh, Alfred A. Appiah (2022). Approaches for the Elimination of Microbial Contaminants from Lippia multiflora Mold. Leaves Intended for Tea Bagging and Evaluation of Formulation. *Advances in Pharmacological and Pharmaceutical Sciences*. https://doi.org/10.1155/2022/7235489
19. Genevieve Naana Yeboah, Frederick William Akuffo Owusu, **Mary-Ann Archer**, Michael Odoi Kyene, Doris Kumadoh, Frederick Ayertey, Susana Oteng Mintah, Peter Atta-Adjei Junior, Alfred Ampomah Appiah (2022). Bridelia ferruginea Benth.; An ethnomedicinal, phytochemical, pharmacological and toxicological review. *Heliyon*. https://doi.org/10.1016/j.heliyon.2022.e10366
20. **Mary-Ann Archer**, Doris Kumadoh, Samuel Nii-Bortier Gaizer, Adelaide Mensah, Jonathan Jato, Micheal Odoi Kyene, Susana Oteng Mintah, Genevieve Naana Yeboah, Paul kwesi Sodzi, Ofosua Adi-Dako (2022). Development and In Vitro Evaluation of Oral Capsules from Antiaris: A Convenient Substitute for Peripheral Neuropathy. *Advances in Pharmacological and Pharmaceutical Sciences*. https://doi.org/10.1155/2022/5340953
21. Susana Oteng Mintah, **Mary-Ann Archer**, Tonny Asafo-Agyei, Fredreick Ayertey, Peter Atta-Adjei Jnr, Daniel Boamah, Kofi Bobi Barimah (2022). Medicinal Plant Use in Ghana: Advancement and Challenges. *American Journal of Plant Sciences*. https://doi.org/10.4236/ajps.2022.133020
22. **Mary-Ann Archer** (2022). Phytochemical, pharmacological and toxicological aspects of Capparis erythrocarpos Isert.: A review. *International Journal of Sciences: Basic and Applied Research*. https://www.academia.edu/download/83274130/kyene_et_al_2022.pdf
23. Michael Odoi Kyene, Eric Kwabena Droepenu, Frederick Ayertey, Genevieve Naana Yeboah, **Mary-Ann Archer**, Doris Kumadoh, Susana Oteng Mintah, Paa Kwesi Gordon, Alfred Ampomah Appiah (2022). Synthesis and characterization of ZnO nanomaterial from Cassia sieberiana and determination of its anti-inflammatory, antioxidant and antimicrobial activities. *Scientific African*. https://doi.org/10.1016/j.sciaf.2022.e01452

24. Emmanuel Adase, Peter Ankutse, Doris Kumadoh, **Mary-Ann Archer**, Michael O. Kyene, Genevieve N. Yeboah, David Okata Asamoah Agyare (2022). "A Review of Parquetina nigrescens (Afzel.) Bullock, A Plant for Traditional Medicine: Phytochemical and Pharmacological Properties". *Evidence-based Complementary and Alternative Medicine*. https://doi.org/10.1155/2022/6076707

25. Doris Kumadoh, **Mary-Ann Archer**, Genevieve N. Yeboah, Michael O. Kyene, Mavis Boakye-Yiadom, Ofosua Adi-Dako, Christina Osei-Asare, Emmanuel Adase, Alfred A. Appiah, Susana O. Mintah (2021). A review on anti-peptic ulcer activities of medicinal plants used in the formulation of Enterica, Dyspepsia and NPK 500 capsules. *Heliyon*. https://doi.org/10.1016/j.heliyon.2021.e08465

26. **Mary-Ann Archer** (2021). Phytochemical, elemental and functional group analyses of herbal material and extracts of Cassia sieberiana used in herbal drug formulation. *Journal of Medicinal Plants Research*. https://academicjournals.org/journal/JMPR/article-full-text/A3AD70868025

27. **Mary-Ann Archer**, Doris Kumadoh, Genevieve Naana Yeboah, Michael Odoi Kyene, Emmanuel Kofi Kumatia, Stephen Antwi, Alfred Ampomah Appiah (2020). Formulation and evaluation of capsules containing extracts of Cassia sieberiana for improved therapeutic outcome. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00609

28. **Mary-Ann Archer**, B Arko-Boham, Elvis O Ameyaw, A Banunle, Robert P Biney, Evans Asenso, Isaac T Henneh, Ama K Thomford, Madison Adanusa (2020). Scientific African. *Carbon*. https://www.researchgate.net/profile/Hamza-Zine/publication/346551011_Guidelines_for_a_phytomanagement_plan_by_the_phytostabilization_of_mining_wastes/links/5fcfd13392851c00f85f0f28/Guidelines-for-a-phytomanagement-plan-by-the-phytostabilization-of-mining-wastes.pdf

29. **Mary-Ann Archer**, Tonny Asafo Agyei, Susana Oteng Mintah, Peter Atta-Adjei, Doris Kumadoh, Jerry Asiedu-Larbi (2019). Medicinal Uses of Cassia Sieberiana; A Review. *International Journal of Sciences: Basic and Applied Research*.

30. **MARY-ANN ARCHER**, Kwabena Ofori-Kwakye, Samuel Lugrie Kipo, Mariam El Boakye-Gyasi, Mary-Ann Fosu (2016). Development of Oral Dissolvable Films of Diclofenac Sodium for Osteoarthritis UsingAlbiziaandKhayaGums as Hydrophilic Film Formers. *Journal of Drug Delivery*. https://doi.org/10.1155/2016/6459280

31. **MARY-ANN ARCHER**, K Ofori-Kwakye, N Kuntworbe (2016). Investigation of blends of cashew and xanthan gums as a potential carrier for colonic delivery of Ibuprofen. *International Journal of PharmTech Research*. https://hero.epa.gov/reference/8281849/

Book chapters 5

1. **Mary-Ann Archer**, Fredreick Ayertey, Susana Oteng Mintah, Tonny Asafo-Agyei, Peter Atta-Adjei Jnr, Paa Kwesi Gordon, Doris Kumadoh (2024). Combination and formulation of Ghanaian herbal products for the treatment and management of disease as potent health tonic. *Elsevier eBooks*. https://doi.org/10.1016/b978-0-443-15383-9.00006-8

2. O Adi-Dako, M Fredua-Agyeman, **Mary Ann Archer** (2021). Nutrient Supplements in the Treatment of Mental Disorders in the Aging Population. *Nutraceuticals for Aging and Anti-Aging*. https://doi.org/10.1201/9781003110866-24/nutrient-supplements-treatment-mental-disorders-aging-population-ofosua-adi-dako-doris-kumadoh-mansa-fredua-agyeman-mary-ann-archer-francis-bentil-manuela-okaijah

3. O Adi-Dako, Esther Eshun Oppong, **Mary Ann Archer** (2021). Pulmonary Drug Delivery: The Role of Polymeric Nanoparticles. *Handbook of Lung Targeted Drug Delivery Systems*. https://doi.org/10.1201/9781003046547-13

4. O Adi-Dako, YA Osei, **Mary Ann Archer** (2021). Recent trends in applications of nano-drug delivery systems. *Handbook of lung targeted drug delivery systems*. https://doi.org/10.1201/9781003046547-16

5. Susana Oteng Mintah, Tonny Asafo-Agyei, **Mary-Ann Archer**, Peter Atta-Adjei Junior, Daniel Boamah, Doris Kumadoh, Alfred Appiah, Augustine Ocloo, Yaw Duah Boakye, Christian Agyare (2019). Medicinal Plants for Treatment of Prevalent Diseases. *IntechOpen eBooks*. https://doi.org/10.5772/intechopen.82049