

V. Y. A Barku

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RESEARCH

Interests Organic Chemistry · Natural Products Chemistry · Phytochemistry
Areas Plant Science · Insect Science · Animal Science and Zoology · Biochemistry · Biochemistry ·
Molecular Biology

RESEARCH SUMMARY

42	754	14	18	0.76	7%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 42 publications listed below, 2006–2025. Field-weighted impact is the mean over the 15 works scored for it; 1.00 is the world average for works of the same field, type and year. 1 of the 15 papers scored for it are among the world's most cited tenth for their field, type and year.

EDUCATION AND QUALIFICATIONS

PhD 2002–present
Department of Chemistry, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 37

1. Enoch Mbawin Alale, Samuel Kofi Tulashie, Daniel Dodoo, Mustapha Iddrisu, Emmanuel Bofo Baidoo, Caleb Mununkum Addai, Kingsley Boateng Opoku Oscar, **Victor Yao Atsu Barku**, Philip Agudah Quasie, Simon Torgah (2025). A comprehensive kinetics and thermodynamics studies of oil extraction from West African avocado: Towards sustainable development. *Industrial Crops and Products*. <https://doi.org/10.1016/j.indcrop.2024.120449>
2. 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>
3. 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>
4. Alex Boye, **Victor Yao Atsu Barku**, Desmond Omane Acheampong, Eric Gyamerah Ofori (2021). Abrus precatorius Leaf Extract Reverses Alloxan/Nicotinamide-Induced Diabetes Mellitus in Rats through Hormonal (Insulin, GLP-1, and Glucagon) and Enzymatic (α -Amylase/ α -Glucosidase) Modulation. *BioMed Research International*. <https://doi.org/10.1155/2021/9920826>
5. ODOI FREDERICK N.A., **VYA Barku** (2021). Composition of water hyacinth (eichhornia crassipes) plant harvested from the volta lake in ghana and its potential value as a feed ingredient in rabbit ration s. *Adv. Anim. Vet. Sci*. https://www.researcherslinks.com/nexus_uploads/files/AAVS_9_2_230-237.pdf
6. **V. Y. A Barku** (2021). Formulation and efficacy assessment of a polyherbal wound healing formula from

Heliotropium indicum and *Nephrolepis biserrata*. *Journal of Complementary Medicine Research*.

7. M. Teye, V. Y. A. Barku, F. N. A. Odoi, C. Kyereme (2021). Water Hyacinth (*Eichhornia crassipes*) Plant Meal in Rabbit Diets: Effects on Meat Quality and Heavy Metal Content. *ACS Food Science & Technology*. <https://doi.org/10.1021/acsfoodscitech.1c00188>
8. 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>
9. VICTOR YA BARKU, YAW OPOKU-BOAHEN (2020). AJ CsiAN OURNALOF HEMISTRY AJ CsiAN OURNALOF HEMISTRY. *Asian Journal of Chemistry*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/56fca0f5-bebf-42e9-8341-a0a8e62af398/content>
10. Victor Y.A. Barku, Yaw Opoku-Boahen, Vida Ackon (2020). Citrus sinensis Seed as a Potential Source of Quality Edible and Industrial Oil. *Asian Journal of Chemistry*. <https://doi.org/10.14233/ajchem.2020.22559>
11. Moses Teye, Victor Y.A. Barku, Julius K. Hagan (2020). Fatty Acid Profile, Carcass and Meat Quality Attributes of Rabbit Breeds in Ghana Fed Diets with Graded Levels of Palm (*Elaeis guineensis*) Kernel Oil Residue. *Advances in Animal and Veterinary Sciences*. <https://doi.org/10.17582/journal.aavs/2020/8.10.1091.1099>
12. VYA Barku (2020). Nutritional Assessment of meals provided to some Pre-school children in Central Region, Ghana. *Pakistan Journal of Nutrition*. <https://pjnonline.org/pjn/article/view/2866>
13. Sophia Ohene-Darko, Victor Y.A. Barku (2020). Nutritional Assessment of Meals Provided to Some Pre-School Children in Central Region, Ghana. *Pakistan Journal of Nutrition*. <https://doi.org/10.3923/pjn.2020.329.336>
14. YAV Barku (2019). Nutri-tional Content of Malt Drinks Sold on the Ghanaian Market.(2019) J Food Nutr Sci 6 (1): 38-42. *Department of Chemistry, School of Physical Sciences, College of Agriculture and Natural Sciences, University of Cape Coast, Ghana*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/b2da167d-d0a7-4edb-b5a0-34dc6defd91f/content>
15. V. Y. A Barku, EA Asiamah, E Asante (2018). Assessment of polyscias fruticosa (L.) Harm (Araliaceae) leaf extract on male fertility in rats. *Journal of Intercultural Ethnopharmacology*. <https://www.academia.edu/download/94776024/55-1498731045.pdf>
16. A Boye, Desmond Omane Acheampong, A Barku, EA Asiamah (2018). Follicular Development and Post-Implantation Loss Assessments in Non-Pregnant and Pregnant Rats Orally Exposed to Polyscias Fruticosa Leaf Extract Follicular Development and *Complement. Med. Res*. https://www.researchgate.net/profile/Desmond-Acheampong/publication/324483147_Follicular_Development_and_Post-implantation_Loss_Assessments_in_non-pregnant_and_pregnant_rats_orally_Exposed_to_Polyscias_Fruticosa_Leaf_Extract/links/5ad06a7a0f7e9b18965d05c1/Follicular-Development-and-Post-implantation-Loss-Assessments-in-non-pregnant-and-pregnant-rats-orally-Exposed-to-Polyscias-Fruticosa-Leaf-Extract.pdf
17. A Boye, VYA Barku, Desmond Omane Acheampong, EA Asiamah (2018). Maternal toxicity and post-implantation assessments in rats gestationally exposed to Polyscias fruticosa leaf extract. *Journal of Complementary Medicine Research*. https://www.researchgate.net/profile/Desmond-Acheampong/publication/324223933_Maternal_toxicity_and_post-implantation_assessments_in_rats_gestationally_exposed_to_Polyscias_fruticosa_leaf_extract/links/5ac63294458515798c319761/Maternal-toxicity-and-post-implantation-assessments-in-rats-gestationally-exposed-to-Polyscias-fruticosa-leaf-extract.pdf
18. Victor Barku (2018). Wound Healing: Contributions from Medicinal Plants and Their Phytoconstituents. *Annual Research & Review in Biology*. <https://doi.org/10.9734/arrb/2018/41301>
19. Victor Barku, Alex Boye, Francis Erzah, Prince Tsamenyi (2016). In-vitro Antioxidant and Wound Healing Properties of Combretum dolichopetalum Engl. and Diels (Combretaceae). *Journal of Applied Pharmaceutical Science*. <https://doi.org/10.7324/japs.2016.60529>
20. George Asumeng Koffuor, Alex Boye, Samuel Kyei, Jones Ofori-Amoah, Emmanuel Akomanin Asiamah,

Atsu Barku, Jacqueline Acheampong, Elikplim Amegashie, Albert Kumi Awuku (2015). Anti-asthmatic property and possible mode of activity of an ethanol leaf extract of *Polyscias fruticosa*. *Pharmaceutical Biology*. <https://doi.org/10.3109/13880209.2015.1077465>

21. Victor Yao Atsu Barku, Yaw Opoku-Boahen, Gertrude A Dali (2015). Ethnobotanical study of wound healing plants in Kpando Traditional Area, Ghana. *International Journal of Phytomedicine*.
22. V. Y. A Barku, BOYE (2014). PRELIMINARY PHYTOCHEMICAL SCREENING, ANTIMICROBIAL EXAMINATION AND WOUND HEALING POTENTIAL OF THE ROOT EXTRACT OF *AMARANTHUS SPINOSUS*. *JOURNAL OF BASIC & APPLIED SCIENCES*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/f098e020-d6ef-400e-8b7b-9ae2451b7995/content>
23. Victor Yao Atsu Barku (2013). 29 PUBLICATIONS 250 CITATIONS. *Asian Journal of Plant Science and Research*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/a5b20e8b-61e9-4826-9053-090084468a5b/content>
24. Alex Boye, EM Victor Yao Atsu Barku, OE Anto (2013). Antinociceptive and antioxidant activity of an aqueous root bark extract of *Daniellia oliveri* (Rolfe) Hutch. & Dalziel (Fam: Leguminosae [Fabaceae]) in ICR mice. *Journal of Applied Pharmaceutical Science*. <https://doi.org/10.7324/japs.2013.31207>
25. VYA Barku, A Boye (2013). Antioxidant and wound healing studies on the extracts of *Corchorus olitorius* leaf. *World Essays J*. https://scholar.archive.org/work/cgfbbeiljva35eq2ii7lls7jbu/access/wayback/http://www.worldessaysj.com/files_site/paperlist/r_55_131011162253.pdf
26. VYA Barku, Y Opoku-Boahen (2013). Available online at www.pelagiaresearchlibrary.com. *Asian Journal of Plant Science and Research*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/c609ecca-3c0b-4fa7-a3db-4287b44b8e63/content>
27. VYA Barku, Yaw Opoku-Boahen, F Mensah (2013). In-vitro assessment of antioxidant and antimicrobial activities of methanol extracts of six wound healing medicinal plants. *In-Vitro*. https://www.academia.edu/download/30633141/In-Vitro_Assessment_of_Antioxidant_and_Antimicrobial_Activities_of_Methanol_Extracts_of_Six_Wound_Healing_Medicinal_Plants.pdf
28. VYA Barku, Alex Boye (2013). Phytochemical screening and assessment of wound healing activity of the leaves of *Anogeissus leiocarpus*. *European Journal of Experimental Biology*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/e09459d9-035d-40f9-a5c5-f6734fc15e3c/content>
29. VAY Barku (2013). Phytochemical studies and antioxidant properties of methanolic and aqueous extracts of the leaves of *Mallotus oppositifolius*. *Journal of Basic & Applied Sciences*.
30. H Nyarko, VICTOR Y. A. BARKU (2012). ANTIMICROBIAL EXAMINATIONS OF *CYMBOPOGON CITRATUS* AND *ADIATUM CAPILLUS-VENERIS* USED IN GHANAIAN FOLKLORE MEDICINE. *International Journal of Life Sciences & Pharma Research*.
31. V. Y. A Barku (2012). Anti-Ectoparasitic activity and safety assessment of an ethanolic stem bark extract of *Turraeanthus africanus*. *International Journal of Pharmacology & Toxicology Science*.
32. V. Y. A. Barku (2012). Phytochemical screening of some indigenous medicinal plant species used in the management of diabetes mellitus in Ghana. *Journal of Medicinal Plants Research*. https://www.academia.edu/download/65976206/Phytochemical_screening_of_some_indigeno20210311-26781-ppvbc.pdf
33. VY Atsu Barku, HD Nyarko (2012). Studies on the physicochemical characteristics, microbial load and storage stability of oil from Indian almond nut (*Terminalia catappa* L.). *Food Science and Quality Management*. <https://www.academia.edu/download/91405041/3019-5053-1-PB.pdf>
34. Y. Opoku-Boahen, V. Y. Atsu Barku, Andrew Dobson (2011). Characterisation of fatty acids in the roots of *Cryptolepis sanguinolenta*. *Chemistry of Natural Compounds*. <https://doi.org/10.1007/s10600-011-0036-9>
35. V. Y. A Barku (2009). BIOLOGICAL ACTIVITIES OF THE EXTRACTS OF *TURRAEANTHUS AFRICANUS* (NELW. EX DC). *INTERNATIONAL JOURNAL OF PURE & APPLIED CHEMISTRY*.
36. V.Y. ATSU BARKU (2007). GC ANALYSIS OF METHANOL IN LOCALLY DISTILLED ALCOHOLIC BEVERAGE "AKPETESHIE" IN GHANA. *INTERNATIONAL JOURNAL OF PURE & APPLIED CHEMISTRY*.
37. F. S. Tayman, V. Y. Atsu Barku, Y. Opoku-Boahen, K. Seifert, D. Grote (2006). Isolation of ent-labdane

(+)-12,15-epoxylabda-8(17), 12,14-trien-16-yl acetate from the seeds of *Turraeanthus africanus* and its cytostatic/cytotoxic effect on the growth of cancer cells in vitro. *Chemistry of Natural Compounds*. <https://doi.org/10.1007/s10600-006-0033-6>

Book chapters 2

1. Victor Y. A. Barku (2019). Wound Healing: Contributions from Plant Secondary Metabolite Antioxidants. *Wound Healing: Current perspectives*. <https://www.intechopen.com/chapters/63675>
2. VY Barku (2019). Wound healing-current perspectives. *IntechOpen; London, UK: Wound Healing: Contributions from Plant Secondary Metabolite Antioxidants*. <https://scholar.google.com/scholar?cluster=12791947320637814898&hl=en&oi=scholar>

Reports 2

1. Victor YA Barku (2019). Nutritional content of malt drinks sold on the Ghanaian market. *University of Cape Coast*. <https://ir.ucc.edu.gh/items/71186f71-1679-4a06-b9bc-894ad5cedb43>
2. VYA Barku, Y Opoku-Boahen (2013). Antioxidant activity and the estimation of total phenolic and flavonoid contents of the root extract of *Amaranthus spinosus*. *University of Cape Coast*. <https://ir.ucc.edu.gh/items/7ed8752f-17e6-48bf-a573-748bcd334084>

Theses 1

1. Victor Yao Atsu Barku (2015). Antioxidant and wound healing properties of some selected plants from kpando traditional area: Isolation of flavonoids from *Anogeissus Leiocarpus* (dc) Guill and Perr (combretaceae). *University of Cape Coast*. <https://ir.ucc.edu.gh/items/6e807a3d-d9f4-4676-b743-8fc22286f4f8>