Kwadwo Boakye Boadu

Lecturer · Faculty of Renewable Natural Resources
Kwame Nkrumah University of Science and Technology

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RESEARCH

Interests: Sustainable Biomaterial Eng. & Mechanics · Wood Paper & Paperboard Packaging · Natural Res. Mgt · Wood Science · Forestry · Forest Biomaterial Mechanics and Engineering · Wood Physics · Wood Packaging · Wood Anatomy · Biodiversity

Areas: Plant Science · Building and Construction · Global and Planetary Change · Forestry · Polymers and Plastics · Mechanical Engineering

RESEARCH SUMMARY

42	278	9	9	0.92	6%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 42 publications listed below, 2013–2026. Field-weighted impact is the mean over the 32 works scored for it; 1.00 is the world average for works of the same field, type and year. 2 of the 32 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer 2021–present
Department of Wood Science and Technology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Lecturer / Examinations Officer 2016–2021
Department of Wood Science and Technology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Graduate Assistant 2012–2015
Wood Science and Technology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Field Assistant 2012
Kwame Nkrumah University of Science and Technology - Japan International Research Centre for Agricultural Sciences (JIRCAS), Kumasi, Ghana

Teaching Assistant 2011–2012
Wood Science and Technology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Assistant Field Leader 2007–2008
Resource Management Support Centre, Forestry Commission, Ghana, Kumasi, Ghana

EDUCATION AND QUALIFICATIONS

Diploma in Education 2020–2021
Interdisciplinary Studies, University of Education Winneba, Winneba, Ghana

Certificate in Environmental Justice 2019–2020
University of East Anglia, Norwich, United Kingdom

PhD Wood Science and Technology 2012–2016
Department of Wood Science and Technology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

MSc Forestry 2012–2015
Bangor University, Bangor, United Kingdom

BSc Natural Resources Management 2008–2011
Wood Science and Technology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Diploma in Natural Resources Management 2004–2007
Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Visiting Scholar 2026–present
Faculty of Natural Resources Management, Lakehead University, Thunder Bay, Canada

Programme Accreditation Assessor 2026–present
Ghana Tertiary Education Commission, Accra, Ghana

External Examiner 2024–present
Forest Science, University of Energy and Natural Resources, Sunyani, Ghana

Member 2018–present
International Society of Tropical Foresters, Washington, DC, United States

Scholarship to pursue MSc Forestry at Bangor University 2012
Commonwealth Scholarship Commission, London, United Kingdom

Erasmus+ KA171 Staff Mobility Participant 2025
Wood Science and Technology, University of Ljubljana, Ljubljana, Slovenia

PUBLICATIONS

Journal articles 42

1. **Kwadwo Boakye Boadu**, Elizabeth Yeboah Israel, Kwasi Adu Obirikorang, Rogerson Anokye (2026). Chemotaxonomic differentiation of Rhizophora mangle L. and Laguncularia racemosa (L.) C.F. Gaertn. based on GC–MS and ATR–FTIR profiles of dichloromethane-soluble stem extractives. *Essential Chem*. https://doi.org/10.1080/28378083.2026.2718702
2. **Kwadwo Boakye Boadu** (2026). EMISSION PROFILES AND TOXICITY ASSESSMENT OF SAWDUST-WASTE PAPER BRIQUETTES FOR CLEAN HOUSEHOLD ENERGY. *Journal of Science and Technology*.
3. **Kwadwo Boakye Boadu**, Yvette Maame Abena Mensah, George Lartey, Martin Adu-Baiden, Rogerson Anokye (2026). Effect of Daylight Exposure under Elevated Temperature and Refrigeration on the Quality of Stew Seasoning Powder Packaged in Metallized Biaxially Oriented Polypropylene (MBOPP). *Journal of Packaging Technology and Research*. https://doi.org/10.1007/s41783-026-00204-0
4. **Kwadwo Boakye Boadu**, Bernard De-Graft Sackey, Jessica Osei Agyemang, Christable Achiaa Agyapong, Rogerson Anokye, Michael Ansong (2026). Effects of surface treatment and joint configuration on the mechanical performance of single finger-joined Terminalia superba and Cylicodiscus gabunensis wood. *Wood Material Science and Engineering*. https://doi.org/10.1080/17480272.2026.2632776
5. **KB Boadu**, R Anokye, M Ansong (2026). Emission Profiles and Toxicity Assessment of Sawdust–Waste Paper Briquettes for Clean Household Energy: Sawdust-Waste Paper Briquette Emissions and Toxicity. *Journal of Science and Technology (Ghana)*. https://www.ajol.info/index.php/just/article/view/334516
6. **Kwadwo Boakye Boadu**, Felicity Asiedu-Appiah, Joana Akua Serwaa Ameyaw, Abigail Agyeiwaa Darkwa, Rogerson Anokye (2026). GHRM enablers and HR managers' perceived competitive advantage: a path analysis of Ghana's package printing firms. *IIMBG Journal of Sustainable Business and Innovation*. https://

doi.org/10.1108/ijsbi-07-2024-0036

7. Benjamin Wiafe Asare, Michael Ansong, **Kwadwo Boakye Boadu**, Prince Owusu (2026). Improving carbon stock estimates in plantation forestry: Site-specific allometric equations for Gmelina arborea in Ghana's Kwahu Highlands. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0355482
8. **Kwadwo Boakye Boadu**, Sylvia Bordoh, Michael Ayim, Caleb Arku, Ofori Attah Nkansah, Rogerson Anokye, Michael Ansong, Kwasi Adu Obirikorang, Richeal Akuorkor Turkson (2026). Influence of red mangrove (Rhizophora mangle) wood age on polycyclic aromatic hydrocarbons (PAHs) and heavy metal accumulation in smoked atlantic chub mackerel (Scomber colias). *Scientific African*. https://doi.org/10.1016/j.sciaf.2026.e03217
9. **Kwadwo Boakye Boadu**, Eunice Adum-Atta, Joana Serwaa Ameyaw, Michael Ansong, Rogerson Anokye (2026). Wood species misrepresentation in Ghana's domestic timber retail trade: Stakeholder perspectives, drivers, and policy responses. *Social Sciences & Humanities Open*. https://doi.org/10.1016/j.ssaho.2026.102972
10. **Kwadwo Boakye Boadu**, Kingsley Agyapong Boakye, Rogerson Anokye, Michael Ansong (2025). From Timber to Steel:. *Journal of African Real Estate Research*. https://doi.org/10.15641/jarer.v10i2.1778
11. **KB Boadu**, R Anokye (2025). From Timber to Steel:: Socio-demographic Drivers Underlying Homeowners' Change in Roof Truss Preferences in Ghana. *Journal of African Real Estate Research*. https://journals.uct.ac.za/index.php/JARER/article/download/1778/1195/12153
12. Rogerson Anokye, **Kwadwo Boakye Boadu**, Derrick Opoku Junior, Judith Odei Owusu-Asante, Keren Adwubi Arthur (2025). Phytochemical efficacy of African orange (Citrus sinensis) peels as a natural termiticidal agent on bamboo (Bambusa vulgaris). *Essential Chem*. https://doi.org/10.1080/28378083.2025.2531882
13. James S. Kaba, Frimpomaa F. Adusei, Birago Ahenkorah, Otchie I. Ohui, Priscilla Ntiamoah, Emmanuella O. Quansah, **Kwadwo Boakye Boadu**, Daniel Dompreh (2025). Variations in soil biological and physicochemical properties of reclaimed artisanal mining sites under cocoa cultivation in Ghana across different reclamation ages. *Sustainable Environment*. https://doi.org/10.1080/27658511.2025.2508543
14. **Kwadwo Boakye Boadu**, Charlesworth Osei Soadwa, Olivia Adamu, Michael Ansong, James Seutra Kaba, Rogerson Anokye (2024). The Impact of Varying Biochar Rate and Particle Size Derived from Bamboo Culm Residue and Coconut Husk Mixture on Lettuce (Lactuca sativa cv. 'Tiberius') Seed Germination and Leaf Morphology. *Journal of Sustainability Research*. https://doi.org/10.20900/jsr20240054
15. Rogerson Anokye, **Kwadwo Boakye Boadu**, Christabel Nusinyo Fianko, Victoria Bubune Amegashiti (2024). The chemical composition of Savannah bamboo (Oxytenanthera abyssinica) vinegar at varying pyrolysis temperatures and its termiticidal activity against wood-feeding termites. *Advances in Bamboo Science*. https://doi.org/10.1016/j.bamboo.2024.100063
16. Michael Ansong, Emmanuel Opoku Yeboah, Joana Akua Serwaa Ameyaw, **Kwadwo Boakye Boadu** (2024). Vandalism on city trees: a case study from KNUST campus, Ghana. *Arboricultural Journal*. https://doi.org/10.1080/03071375.2024.2358689
17. **KB Boadu**, Anokye (2023). EVALUATION OF PHYSICO-MECHANICAL PROPERTIES AND BIODEGRADABILITY OF PLANT CONTAINERS MADE FROM BIOMATERIALS FOR SUSTAINABLE AGRICULTURE. *Journal of Agricultural Research*. https://jaragri.com/jar/index.php/jar/article/view/67
18. **Kwadwo Boakye Boadu**, Rosemary Nsiah-Asante, Richard Tuffuor Antwi, Kwasi Adu Obirikorang, Rogerson Anokye, Michael Ansong (2023). Influence of the chemical content of sawdust on the levels of important macronutrients and ash composition in Pearl oyster mushroom (Pleurotus ostreatus). *PLoS ONE*. https://doi.org/10.1371/journal.pone.0287532
19. Michael Ansong, Joana Akua Serwaa Ameyaw, **Kwadwo Boakye Boadu**, Sedomda Kpikpitse, Emmanuel Acheampong (2023). Local communities' willingness to pay for increasing the status of a Forest Reserve in Ghana to a National Park. *Social Sciences & Humanities Open*. https://doi.org/10.1016/j.ssaho.2023.100516
20. Wonder Sekey, Kwasi Adu Obirikorang, **Kwadwo Boakye Boadu**, Benjamin Apraku Gyampoh, Angela Nantwi-Mensah, Elizabeth Yeboah Israel, Oparebea Asare-Ansah, George Ashiagbor, Daniel Adjei-

Boateng (2023). Mangrove plantation and fuelwood supply chain dynamics in the Keta Lagoon Complex Ramsar Site, Ghana. *Wetlands Ecology and Management*. https://doi.org/10.1007/s11273-022-09906-z

21. Jesugnon Fifamè Murielle Féty Tonouéwa, Samadori Sorotori Honoré Biaou, **Kwadwo Boakye Boadu**, Eméline Sêssi Pélagie Assèdé, Douglas Amoah, Emmanuel Ebanyenle (2023). Use of Acacia auriculiformis fast-growing tree species for the mitigation of climate change. *CERNE*. https://doi.org/10.1590/01047760202329013213
22. **Kwadwo Boakye Boadu**, Rogerson Anokye, Kojo Agyapong Afrifah, Erasmus Narteh Tetteh, Osei Felix Anning, Boateng Kelvin Osei (2022). Characterization of the fibre morphology and chemical composition of aged PB 260 and IRCA 41 clones of rubber (Hevea brasiliensis) wood for pulp and paper making. *Journal of the Indian Academy of Wood Science*. https://doi.org/10.1007/s13196-022-00304-9
23. **Kwadwo Boakye Boadu**, Michael Ansong, Rogerson Anokye, Kelvin Offeh-Gyimah, Enoch Amoah (2022). Physico-thermal and emission properties of tissue cultured clone from Bambusa balcoaa (Beema bamboo) and Oxytenanthera abyssinica as sustainable solid biofuels. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0279586
24. **KB Boadu** (2022). Synergistic effect of alcohols, ketone and water on the yield of soluble compounds and tannins from the barks of Azadirachta indica A. Juss. and Moringa oleifera Lam. *Wood Research Journal*. http://www.ejournalmapeki.org/index.php/wrj/article/view/553
25. Linda Kakraba, **Kwadwo Boakye Boadu**, James Kudjo Govina (2022). Tissue and resin canal biometry of Pinus radiata D. Don. and Pinus caribaea Morelet wood from plantation forest. *Journal of the Indian Academy of Wood Science*. https://doi.org/10.1007/s13196-022-00298-4
26. Mercy Afua Adutwumwaa Derkyi, Yaw Appau, **Kwadwo Boakye Boadu** (2021). Factors influencing community participation in the implementation and monitoring of FLEGT-VPA in Ghana. *Forestry Economics Review*. https://doi.org/10.1108/fer-07-2020-0010
27. **Kwadwo Boakye Boadu**, Michael Ansong, Kojo Agyapong Afrifah, Elizabeth Nsiah-Asante (2020). Pulp and Paper Making Characteristics of Fibers from Plantation-grownOxythenantera Abyssinicaand Beema Bamboo (A Tissue Cultured Clone fromBambusa Balcooa). *Journal of Natural Fibers*. https://doi.org/10.1080/15440478.2020.1856270
28. **Kwadwo Boakye Boadu**, 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. **Kwadwo Boakye Boadu** (2019). Global Outlook on Forest Education (GOFE) A Special Report: Forest Education in Africa. *Global Outlook on Forest Education (GOFE): A Special Report: Forest Education in Africa*. https://www.academia.edu/download/106600449/gofe_2019_africa_report.pdf
30. Samuel Ofosu, **Kwadwo Boakye Boadu**, Kojo Agyapong Afrifah (2019). Suitability of Chrysophyllum albidum from moist semi-deciduous forest in Ghana as a raw material for manufacturing paper-based products. *Journal of Sustainable Forestry*. https://doi.org/10.1080/10549811.2019.1623052
31. **K. Boakye Boadu**, D.E.K.A. Siaw (2019). The effect of storage period on the viability of Triplochiton scleroxylon K. Schum. seeds. *Scientific African*. https://doi.org/10.1016/j.sciaf.2019.e00127
32. D Adom, EA Asante, **BB Kwadwo** (2018). Investigation of the cultural and artistic elements in the biodiversity policies and strategies in Ghana. *J. Biodivers. Manag. For*. https://www.researchgate.net/profile/Dickson-Adom/publication/324976321_Investigation_of_the_Cultural_and_Artistic_Elements_in_the_Biodiversity_Policies_and_Strategies_in_Ghana/links/5cd00cf3a6fdccc9dd9027a0/Investigation-of-the-Cultural-and-Artistic-Elements-in-the-Biodiversity-Policies-and-Strategies-in-Ghana.pdf?origin=journalDetail&_tp=eyJwYWdlIjoiam91cm5hbERldGFpbCJ9
33. **KB Boadu**, C ANTWI-BOASIAKO (2018). Linear relationship between several anatomical characteristics of Entandrophragma cylindricum and the strength of its mortise-tenon joint. *PRO LIGNO*. http://www.proligno.ro/en/articles/2018/3/BOADU.pdf

34. **Kwadwo Boakye Boadu**, Charles Antwi-Boasiako, Linda Ofosuhene (2018). Solvent extraction of inhibitory substances from three hardwoods of different densities and their compatibility with cement in composite production. *Journal of the Indian Academy of Wood Science*. https://doi.org/10.1007/s13196-018-0219-0

35. Charles Antwi-Boasiako, Linda Ofosuhene, **Kwadwo B. Boadu** (2018). Suitability of sawdust from three tropical timbers for wood-cement composites. *Journal of Sustainable Forestry*. https://doi.org/10.1080/10549811.2018.1427112

36. C Antwi-Boasiako, **BK Boadu** (2018). Thermal conductivity, resistance and specific heat capacity of chemically-treated, widely-used timber for building-envelope. *High Temperatures-High Pressures*. https://openurl.ebsco.com/contentitem/gcd:128129673?sid=ebsco:plink:crawler-gcd&id=ebsco:gcd:128129673&crl=c&jrnl=00181544

37. Charles Antwi-Boasiako, **Kwadwo Boakye Boadu**, Kwasi Frimpong-Mensah (2017). Termite resistance of Klainedoxa gabonensis (kruma), a tropical lesser-utilised-species for commercial utilisation. *International Wood Products Journal*. https://doi.org/10.1080/20426445.2017.1317470

38. Eric Appau Asante, Stephen Ababio, **Kwadwo Boakye Boadu** (2017). The Use of Indigenous Cultural Practices by the Ashantis for the Conservation of Forests in Ghana. *SAGE Open*. https://doi.org/10.1177/2158244016687611

39. **Kwadwo Boakye Boadu**, Charles Antwi-Boasiako (2016). Assessment of the bending strength of mortise-tenon and dovetail joints in leg-and-rail construction using Klainedoxa gabonensis Pierre Ex Engl. and Entandrophragma cylindricum (Sprague) Sprague. *Wood Material Science and Engineering*. https://doi.org/10.1080/17480272.2016.1174883

40. **K. Boakye Boadu**, C. Antwi-Boasiako, K. Frimpong-Mensah (2016). Physical and mechanical properties of Klainedoxa gabonensis with engineering potential. *Journal of Forestry Research*. https://doi.org/10.1007/s11676-016-0331-1

41. Charles Antwi-Boasiako, **Kwadwo Boadu** (2016). The Level of Utilization of Secondary Timber Species among Furniture Producers. *South-east European forestry*. https://doi.org/10.15177/seefor.16-08

42. Charles Antwi-Boasiako, **Kwadwo Boakye Boadu** (2013). SWELLING CHARACTERISTICS OF CONVENTIONAL AND ORGANIC PRESERVATIVE-TREATED POROUS TROPICAL UTILITY HARDWOOD [CEIBA PENTANDRA (L.) GAERTN.]. *Special Topics & Reviews in Porous Media An International Journal*. https://doi.org/10.1615/specialtopicsrevporousmedia.v4.i2.30