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RESEARCH

Interests	Kinetics and Reaction Engineering · Heterogenous Catalysis · Biochemical Engineering · Modelling
Areas	Biomedical Engineering · Building and Construction · Molecular Biology · Control and Systems Engineering · Mechanical Engineering · Waste Management and Disposal

RESEARCH SUMMARY

90	813	13	20	1.37	12%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 90 publications listed below, 2013–2026. Field-weighted impact is the mean over the 81 works scored for it; 1.00 is the world average for works of the same field, type and year. 10 of the 81 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 84

1. Mary Mensah, **Nana Yaw Asiedu**, Jonatham Iggo, Konstantin Luzyanin, David Dodoo-Arhin, Jianliang Xiao (2026). Aqueous-phase depolymerization of waste cocoa pod husk lignin to produce aromatic monomers using terpyridine-based complex catalysts and advanced spectroscopic techniques. *Microchemical Journal*. https://doi.org/10.1016/j.microc.2026.117632
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3. Mark Korang Yeboah, Ahmad Addo, **Nana Yaw Asiedu** (2026). Multi-Product Modeling of Consolidated Bioprocessing Using a Literature-Derived Dataset: A Multi-Output Learning Framework for Ethanol and Co-Products. *Fermentation*. https://doi.org/10.3390/fermentation12050224
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6. Isaac Mensah, Satyanarayana Narra, Julius Cudjoe Ahiekpor, **Nana Yaw Asiedu** (2026). Refuse-derived fuel gasification for energy production: a science mapping analysis and systematic literature review. *Frontiers in Environmental Science*. https://doi.org/10.3389/fenvs.2026.1757418
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10. Mark Korang Yeboah, **Nana Yaw Asiedu** (2026). Uncertainty-Aware Bayesian Machine Learning for Thermo-Kinetic Parameter Estimation from Noisy Temperature Profiles. *Machine Learning and Knowledge Extraction*. https://doi.org/10.3390/make8080235
11. Eunice Akyereko Adjei, God'sable Sitsofe Koku Aidam, Richard Opoku, Martina Francisca Baidoo, **Nana Yaw Asiedu**, Charles Kofi Kafui Sekyere, George Yaw Obeng (2025). Bridging renewable energy policy and sustainable aviation fuel deployment: empirical insights from biomass resources in West Africa. *Next research.*. https://doi.org/10.1016/j.nexres.2025.101065
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17. Simon Yao Adzaklo, Kwame Sarkodie, Emmanuel Agyei, Stephen Yamoah, **Nana Yaw Asiedu** (2025). Investigation of drag models for simulation of gas-liquid two-phase flow systems. *Scientific Reports*. https://doi.org/10.1038/s41598-025-23038-3
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19. Amma Konadu Adjei, Eunice Dogbe, **Nana Yaw Asiedu**, Enoch Asante, Ahmad Addo, Razak Seidu (2025). Multi-response optimization and machine learning modeling algorithms of electrocoagulation parameters for cost-effective micro-algae harvesting. *Next Chemical Engineering*. https://doi.org/10.1016/j.nxcen.2025.100019
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21. J. K. Dadson, **N. Y. Asiedu**, J. A. Iggo, L. Konstantin, J. Ackora-Pra, M. F. Baidoo, O. Akoto (2024). A proposed two-level classification approach for forensic detection of diesel adulteration using NMR spectroscopy and machine learning. *Analytical and Bioanalytical Chemistry*. https://doi.org/10.1007/s00216-024-05384-9
22. Miriam Appiah-Brempong, Helen Michelle Korkor Essandoh, **Nana Yaw Asiedu**, Francis Yao Momade (2024). Bone Char Adsorption of COD and Colour from Tannery Wastewater: Breakthrough Curve Analysis and Fixed Bed Dynamic Modelling. *Advances in Civil Engineering*. https://doi.org/

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32. Rapheal Nsiah-Gyambibi, Helen Michelle Korkor Essandoh, **Nana Yaw Asiedu**, Bernard Fei-Baffoe (2024). Valorization of Fecal Sludge Stabilization via Vermicomposting in Microcosm-Enriched Substrates Using Organic Plant-Derived Materials and Agricultural Soil for Compost Production. *Compost Science & Utilization*. https://doi.org/10.1080/1065657x.2024.2368224

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Assess Neurocognition in Hospitalized Psychosis Patients in Uganda. *Journal of the International Neuropsychological Society*. https://doi.org/10.1017/s1355617723010573

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Book chapters 2

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